DOCUMENT RESUME

ED 131 012 88 SP 010 571

AUTHOR Drummond, Robert; And Others
TITLE Project STEP (Seniors Tutor for Educational Progress) On-Site Validation Report.
INSTITUTION Easton-Redding Regional School District 9, Conn.
PUB DATE 6 Mar 75
NOTE 126p.; For related documents, see ED 120 295-296; Not available in hard copy due to marginal reproducibility of original

EDRS PRICE MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS Community Involvement; Cross Age Teaching; Educational Alternatives; *Handicapped Students; Individual Development; *Junior High School Students; *Learning Disabilities; Older Adults; Program Descriptions; *Program Evaluation; Remedial Instruction; Secondary Education; Secondary School Teachers; *Senior Citizens; *Tutorial Programs; Tutors
IDENTIFIERS Connecticut (Redding); Elementary Secondary Education Act Title III; ESEA Title III; *Project Seniors Tutor for Educational Progress; Project STEP

ABSTRACT

Project STEP was developed at John Reed Middle School, Redding, Connecticut, to investigate the feasibility of directly involving retired citizens in an instructional relationship with learning-disabled junior and senior high school students. The project proposed to demonstrate the effectiveness of techniques for training senior citizens as remedial tutors, increasing the academic skills of the students, improving the psychological well-being of the students, and providing the classroom teachers with materials developed by the tutors and adolescents. The validation team examined the program, and found it satisfactory in three general areas -- (1) Effectiveness/Success: the project demonstrated success in training senior citizens to act as tutors of the learning disabled student, academic achievement of these students as well as their attitudes toward school have improved, and positive behavior changes and attitudes were reported by parents; (2) Cost Information: the program followed standard budgetary procedures, expended money in an appropriate fashion, and reported fiscal matters in a fashion easily adoptable or adaptable by other interested school districts; (3) Exportability: the project as written and developed can be exported to other systems. The validation team noted three areas of innovation--the use of senior citizens as tutors for learning disabled students, the use of a game approach rather than a traditional didactic relationship, and the stress on affective as well as cognitive behavioral change on the part of both tutor and tutee. (MB)

Documents acquired by ERIC include many informal unpublished materials not available from other sources. ERIC makes every effort to obtain the best copy available. Nevertheless, items of marginal reproducibility are often encountered and this affects the quality of the microfiche and hardcopy reproductions ERIC makes available via the ERIC Document Reproduction Service (EDRS). EDRS is not responsible for the quality of the original document. Reproductions supplied by EDRS are the best that can be made from the original.

ED131012

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

PROJECT S.T.E.P.*

*SENIORS TUTOR FOR EDUCATIONAL PROGRESS

ON-SITE VALIDATION REPORT

by

Dr. Robert Drummond
University of Maine at Orono
Orono, Maine

Dr. Edward McDermott
Wakefield, Rhode Island

Dr. John Swayze
Tunbridge, Vermont

BEST COPY AVAILABLE

Redding Elementary School
Redding, Connecticut

March 6, 1975

SP010 571

PART I--Information and Project Description
(Complete Part I after completing Parts II through IV.)*

A. PROJECT INFORMATION

Area of concern Handicapped
(e.g., Career Education, Handicapped, Reading, etc.)

Project Title S.T.E.P. - Seniors Tutor for Educational Progress

Project Director's Name Mrs. Rosalie R. Saul

Redding Elementary School, Redding, Connecticut 06875
Address City State Zip Code

Phone Number (include area code) 203-938-2519

Application Agency Regional District #9

Location Center Street,
(Street Address)

Easton, Connecticut 06425
City State Zip Code

Superintendent's Name Lawrence R. Miller

Center Street , Easton, Connecticut 06425
Address City State Zip Code

Phone Number (include area code) 203-743-1772

Project Period: beginning 1973 (date); ending 1977 (date)

Expenditures

Grant Period	Title III Funds	Other Funds	Total Funds
1973 to 1974	$ 23,000.	$ 2,000.	$ 25,000.
1974 to 1975	$ 36,200.	$ 17,375.	$ 53,575.
_____ to _____	$	$	$
_____ to _____	$	$	$
Total	$ 59,200.	$ 19,375.	$ 78,575.

*/ Parts II through IV serve as the source of information for Part I.

PART I--Information and Project Description

B. PROJECT DESCRIPTION

1. Describing the Context

a. Connecticut legislation mandates that schools provide programs for all exceptional children. The needs of the adolescent are usually met with either self contained classes, a resource situation, an itinerant teacher or an outplacement to a special school. Providing additional help to youngsters who are mainstreamed seems to be desirable as the child may remain in his normal school setting and the stigma of being singled out is eliminated. This project takes the best of each and provides a flexible self contained situation within the mainstream and allows the secondary school teacher, who has been trained to carry out a specific curriculum and is now accountable for same, to be relieved of the child with learning problems whose disruptive or withdrawn behavior frustrates the teacher and other pupils in a regular class. It also provides support for the child with borderline problems to remain in the class. Boards of Education are skeptical about funding innovative projects, therefore an application for a pilot study of a Senior Citizen tutoring project was submitted to E.S.E.A. Title III in 1973.

b. This demonstration project is investigating the feasibility of directly involving retired citizens in a useful, instructional relationship with underachieving adolescents. Specifically, Senior Citizens act as tutors for learning disabled Junior and Senior High School students. Together adults and children make "learning games" for elementary school students, thus giving elementary teachers an added resource for materials. Adolescents' work is geared toward their academic needs, and Senior Citizens and adolescents develop relationships they both find meaningful.

c. Twenty-five 7th and 8th grade students from John Read Middle School, Redding, Connecticut are being used as the pilot population. Redding has a population of 6,000. The total population of Connecticut is 3,320,217. The town of Redding is served by an elementary school containing grades K-4 and a middle school containing grades 5-8 with a population of 1257. There are no non-profit public schools in this town.

PART I--Information and Project Description (cont.)

1. Describing the Context (cont.)

c. (cont.)
The total budget and special education budget for the district are as follows:

	1973-74	1974-75
Regular Budget	$1,598,878	$1,821,571
Special Education Budget	43,190	75,512

It is obvious that the town has not been remiss in anyway in providing remedial services, but this investigator questions whether the same funds might be used to render more meaningful programs. Much of the above money is being spent in transportation or self contained classes.

The town's revenues are almost entirely from residential taxes or from the Bridgeport Hydraulic Company which owns much of the land so that the company may provide water to the surrounding communities. There is almost no industry in the town but a great deal of protected open space, so that work-study programs cannot be carried on. The town has received Title I funds for the past seven years as there is a segment of the population in economic need.

The town is centrally located so that Project S.T.E.P. now employs senior tutors from five surrounding communities. The geographical accessibility of Redding should prove an asset in encouraging other schools to replicate the project.

2. Explaining the Project

a. The project proposes to do the following:

1. Demonstrate the effectiveness of techniques for training retired senior citizens to act as remedial tutors for handicapped 7th and 8th grade students.

2. Increase academic skills of the learning disabled student during their year of participation in S.T.E.P.

PART I--Information and Project Description (cont.)

2. Explaining the Project (cont.)

a. (cont.)

3. Improve the psychological well-being of the learning disabled student by his participation in S.T.E.P.

4. To provide elementary classroom teachers with materials constructed by the adolescents and their tutors.

This is not traditional tutoring because by the time a disabled learner gets to junior high school he may have encountered up to seven years of frustration in virtually every phase of his educational experience. This, coupled with the onset of adolescence and the approaching age limits of mandatory school attendance make it necessary to treat him differently than the child with difficulties in early school for whom the developmental approach may be appropriate.

Due to the complexity of the problem of providing for adolescents, we must necessarily attempt a total program dealing with all aspects of his needs; thus, we cannot be concerned solely with the remediation aspect of his learning disabilities, but we must attempt to make significant changes in the total learning environment, by:

1. Offering an alternate education experience for our disabled learners within their own building.

2. Reducing the cost of special education.

3. Removing him from the regular classroom competition, demands and frustrations when necessary.

4. Providing a basis for success in school learning.

5. Remediating perceptual and language deficits.

6. Developing problem-solving techniques.

7. Preparing him for life by offering apprenticeship training by retired craftsmen.

8. Helping him to feel his worth by providing elementary school teachers with meaningful learning materials for their pupils.

PART I--Information and Project Description (cont.)

2. Explaining the Project (cont.)

a. (cont.)
In addition to meeting the above named objectives this project provides Senior Citizens with added income and a fruitful life.

b. The Tutoring program, henceforth known as S.T.E.P. (Seniors Tutor for Educational Progress) spent 1973-74 in screening, recruiting, training and identifying those Senior Citizens who could develop a relationship with the specific teenage population which the project proposed to remediate academically, socially, emotionally and vocationally. During this training period the would-be tutors spent much time observing in all level classes, participating in group discussions, reading, role playing and attending lectures by the director, psychologist, and educators.

In addition to these experiences, in which theory prevailed, the tutors were assigned to specific children for the purpose of making learning materials and games to fill orders initiated by either elementary school teachers or the director. The assignments of the orders were presented to a tutor and his tutee based on the needs of the tutee. The director or coordinator guided the team in producing the materials by task breaking, diagnostic teaching, and sensory motor development.

The personnel required to carry out the activities are a coordinator and the tutors. Auxiliary personnel for senior training sessions, screening of the pupils and tutors, and evaluation of the program would be a psychologist, social worker, speech therapist, reading consultant and other educators as deemed necessary. Limited funds allowed the project a minimum of these services.

Nine Senior Citizens are working an aggregate of 155 man hours per week with 25 children whose problems are either physical, emotional, perceptual, intellectual or a combination of these. The students are released from either major subjects in which they are unable to function or from "elective-selective"

PART I--Information and Project Description (cont.)

2. Explaining the Project (cont.)

b. (cont.)
classes such as music, art, physical education, home economics or industrial arts. The 7th and 8th grade teachers do team planning. Each student in the program is assigned to a team where his strengths and weakness are discussed. The director of Project S.T.E.P. attends the team meeting to help coordinate the efforts of the teachers and the S.T.E.P. tutors. If a child is missing an English period, the tutor is given an assignment by the director to construct a learning aid related to English. The student who comes during an "elective-selective" period the tutor might help with either homework or production of a product related to a subject in which he is weak.

Adequate space is required to carry out the project and the materials needed are art and industrial art supplies, library books, tape recorders or other materials which are available in any school.

Training of the tutors, providing individualized prescriptions for the activities and giving close supervision to the tutor-tutee pairs is vital to the success of the program. A serious effort is made to avoid embarassing students. The tutors do not listen to the youngsters read and correct them. The coordinator, through formal and informal testing, ascertains if the child has a decoding problem or comprehension problem. If "word attack" is the weakness, the pupil and his tutor develop a game for a younger child with a similar problem. The following is a description of a short vowel game developed last year.

PART I--Information and Project Description (cont.)

2. Explaining the Project (cont.)

b. (cont.)

Material: "Snoopy Vowel Game"

Subject: Reading and Spelling

Purpose: To offer experience in vowel pronunciation and usage.

Materials: Game board with Snoopy pictures; each picture is marked with one vowel on Snoopy's nose and one vowel on a book he carries. (These vowels are marked short or long). A gold paper fastener is inserted next to each vowel.

Snoopy "Bones" with string attached. Each bone bears a word with a single vowel.

Directions: Player draws a "bone" and says word on "bone".

Player must then match vowel he sees and hears in this word with vowel on Snoopy board.

When player finds a vowel match, he must hang the "bone" by its string to the paper fastener next to the vowel on the Snoopy board, e.g., if a player draws a "bone" with the word hill, he must hang this "bone" on the Snoopy with the i.

The first player to hang the "bones" wins the game.

By: L. S. and P. L., Grade 7, John Read Middle School
Peggy Zeloni, S.T.E.P. Tutor.

One hundred and forty-four games have been developed. A description of some of them is included in a catalogue "Samples of Learning Aides Developed in Project S.T.E.P.".

PART I--Information and Project Description (cont.)

2. Explaining the Project (cont.)

c. John Read Middle School has tried to meet the needs of the disabled 7th and 8th grade learner in either a resource situation or busing him to other schools. However, in the resource situation, much of the burden is placed on the classroom teacher as a special teacher who has a limited amount of time to spend with individuals or small groups. This school, as most of the other area schools, is extremely academically oriented and children who still need help in obtaining skills necessary to function at the junior high level have difficulty in identifying with the environment. Although this investigator believes that the children need to acquire academic skills, she believes that the skills will be more meaningful if approached through problem solving methods in a non-threatening environment. She also believes that remedial education, as well as all education, is preparation for life and not solely preparation for future education. The project has therefore identified twenty-five 7th and 8th grade disabled learners most of whom have multiple handicaps and provided them with trained retired senior citizen as tutors. The pairs are carefully supervised by a learning disability teacher. Project S.T.E.P. meets the needs of the 7th and 8th grade pupils by one of the following methods:

1. Removing a child from one or more specific classes and providing him with an alternate learning experience related to the subjects or,

2. Helping him to complete assignments or produce materials as suggested by his subject teacher in cooperation with the project director or

3. Developing a relationship with him as a basis for future functioning if his emotional problems are extremely severe.

The program is flexible enough to remove a child from as many classes as is deemed necessary by the school staff or to supplement instruction for the student as requested by a single subject teacher.

PART I--Information and Project Description (cont.)

2. Explaining the Project (cont.)

c. (cont.)

Because of the variety of the tutors there is at least one to whom each child can relate. A normal school can provide only a limited professional staff and many exceptional children can find few to whom they can relate. Before Project S.T.E.P. the principal's office was the recipient of most of the program's clientele. This year one rarely finds a S.T.E.P. participant " on the bench". Teachers are either relieved of the disruptive child or the youngster has been helped to function in the mainstream. Besides helping children and teachers, this program has also proved valuable in bolstering the ego of the senior citizens and has helped parents to understand their children's needs.

The proposal has much value from a sociological point of view as well as from an economical point of view. This seems to be the first program which utilizes the skills of the elderly in the junior or senior high schools although they have been used before on a voluntary basis as "grannies" with young children. The youngsters in this project are those who have met with frustration in school for seven or more years and finding a person who is not a teacher, to whom they might relate in a meaningful way can make a great difference in their future attitudes and achievements. At the same time, the lonely older person can add a new dimension to his life by feeling needed as well as being renumerated for his efforts. (Four of the tutors are being paid by the Department of Labor through Project Mainstream in Danbury and the others are funded in this grant.) This investigator strongly believes that man feels his worth by being productive. To some productivity has meaning only when he receives a concrete reward. To others satisfaction is achieved by helping others. The latter probably suffices for those who are financially comfortable but for those whose income is inadequate this reward is meaningless. The new Social Security law allows senior citizens to earn supplemental incomes, and this program serves as an excellent means of employment for those in need.

PART I--Information and Project Description (cont.)

2. Explaining the Project (cont.)

c. (cont.)

In the Parent Questionnaire parents have indicated that they, too, have benefitted from the program because their children are much more manageable at home.

Both group meetings and individual conferences have been held with parents at which time an effort was made to help the parents understand their children's needs. The parents, in general, have been most positive about the project and feel that it had done a great deal for their children.

d. All services are an integral part of school as the program meets at the John Read Middle School five days a week from 9:30 to 2:00. One period a day is allowed for the training of the senior citizens and another period is allowed for lunch. The balance of the day is spent in an instructional relationship with the students. Some children are in the program only one period a day and some are in it as many as three periods a day. A new dimension will be added to the program. On January 15th four children and two seniors will use the materials they have constructed with the K-4 youngsters at the Redding Elementary School for the last period of the day plus an additional hour two days of the week. If this is successful we hope to increase this portion of the program for more youngsters. Pre and post testing of the younger children will be administered to ascertain the effectiveness of this experiment.

e. Human interest examples:

1. Exerpts from Reports Written by Tutors

Anecdotal information was collected from the tutors to evaluate the children's self-image.

The trust level of the children broadened after the first few weeks had elapsed and a smooth working pattern developed between the tutors and tutees. The

PART I--Information and Project Description (cont.)

2. Explaining the Project (cont.)

e. (cont.)
tutors now described the children as saying:

--"She expressed the hope that she could come to STEP every day as she enjoys it so much."

--"Some appeared shy and withdrawn at the onset, but have gradually become interested and productive. Many have suggested projects and have followed through with the aid of tutors -- I especially believe that they are able to communicate with us much more freely than before."

--"While she worked, she discussed many problems with me, and I tried to help her."

As a result of the students' abilities to relate harmoniously with their tutors noticeable changes occurred behaviorally.

--"The timid and reserved children seem to have expanded -- after a few weeks, they all come up with creative and usable ideas -- on the other hand, a few of the more aggressive children seem to have simmered down a bit."

--"Was gratified and pleased to see the improving behavior, skills and accomplishments of some of the students, who had been give up as inattentive at best, disruptive and hopeless at worst."

--"One young man was considered the bane of the school, and was almost unteachable and uncontrollable. His interest in plants and growing was discovered, and the beginning has been made in having him construct apparatus for procreating and possible landscape designing. He has begun to calm down to some degree and we hope to make him reasonably amenable in the near future."

PART I--Information and Project Description (cont.)

2. Explaining the Project (cont.)

e. (cont.)

The molding of a child's self-image was best expressed by one tutor in the following:

--"When I started working with this student, he had a very short attention span. He was very impulsive, plunging into suggested work without thinking or planning. He said he had a "good eye" in judging lines and spacing, and always finding out too late that he had misjudged -- I patiently showed him how to use a ruler, how to carefully measure distances, and he soon learned to take pride in his work. All the time I have been working with him, I was surprised to learn from him, I had been smiling and pleasant. When he asked me why I was always smiling, I asked him whether he would rather have me frown. Of course, he said, 'No,' and further questioning revealed that he never saw his father and mother smile. He said my smiling makes him happy and he feels good. We have an excellent relationship with very few difficulties. He says he prefers to work with me and his work has improved tremendously."

2. Excerpts from Reports Written by Children

Children's remarks indicate that they have grown socially and emotionally, and have developed a positive feeling towards school, the tutors, and the program:

--"I think it should continue because it helps the kids out that have problems in other classes get their mind on work and it kinda cools you down because sometimes you get sick of Science, English and sometimes I don't like some classes."

Another 7th grade child was able to reflect on his prior feelings about school and said:

PART I--Information and Project Description (cont.)

2. Explaining the Project (cont.)

e. (cont.)

--"Once I came to STEP -- (I didn't really feel so hot about school), but as it went along I thought it was a little better -- I used to get into trouble all the time around 6th grade and all. Now since STEP is here I think I am learning more."

The student's ability to verbalize his feelings suggests he is not only progressing academically but is now able to relate more easily to adults.

--"You know what it is -- you don't learn as much in the big classes. Everyone is fooling around or the teachers's helping someone else or if you don't understand it -- if she is explaining something to the class, but some other kids do understand it, she won't stop it and explain it to you. The other kids want to go on and you don't learn, and that's why when they (the STEP tutors) teach us something you are by yourself -- with a couple of kids and you learn."

3. Excerpts from Reports Written by Parents

--"My other children have a lot of trouble in school. L. has started to help her little sister and her sister is doing better now."

--"There has been a definite change. She plans her work much better. Before the program she used to leave work 'til last minute."

--"In previous years she did not like school. She complained of headaches."

--"He walks to school and leaves home before he has to because he likes school so much and is making good progress."

--"I'm very well pleased with what he's doing."

PART I--Information and Project Description (cont.)

2. Explaining the Project (cont.)

e. (cont.)

--"Mr. C. was so pleased that he has offered his services (a photographer and writer of weeknown) to do a picture story gratis for any purpose we would like..."

--"Know J is an underachiever; am truly pleased that STEP is giving him an opportunity to express himself creatively."

--"...her math was poor -- it's better; got B- (first time she ever got a decent mark in math)."

--"I think it opened him up some and talking and working with adults is helpful. I can't pinpoint it, but I do see changes. Maybe he's maturing. He's interested in other things now and is better about his paper route. Now he's a good mixer and is able to relate to other children better."

4. Excerpts from Reports by Teachers

A few remarks were:

--science, "more organized, more motivated, and has a less introverted attitude."

--social studies, "he is doing brilliantly now."

--math, "not as drastically introverted as before and interacts more with kids."

--reading, "oral and written expression, spelling and punctuation showed a definite improvement."

PART I--Information and Project Description (cont.)

3. Describing Effectiveness

a. The major measurable objectives to be validated were:

1. To demonstrate the effectiveness of techniques for training retired senior citizens to act as remedial tutors for handicapped 7th and 8th grade students.

2. To increase the academic skills of the learning disabled students during their year of participation in Project S.T.E.P.

3. To increase the psychological well-being of the learning disabled student by their participation in Project S.T.E.P.

In addition to the above, this year the K-5 grade pupils and teachers are evaluating the effectiveness of the games and materials produced by Project S.T.E.P. The teaching materials and games were not distributed until this year as it was necessary to retain them for dissemination of information at certain gatherings, and because pictures and descriptions of them are to be included in a catalogue that the project plans to develop. In addition to the data which has been validated, much anecdotal material was collected from the tutors, students, parents and teachers. This material appears as attachments, but some will be quoted to support the statistical evidence.

b. Children were assigned to the program through prior testing, their performance in their classes, recommendations from the teachers and guidance counselors. The selected students met with the tutors, the school guidance counselor and the director of the program who described the project to them in detail. During this meeting each pupil and senior described his own background and interests. The students were allowed to choose if they wished to participate in the program or not. Of twenty-four children at this meeting all but one wished to be part of the program. Not all of these twenty-three finished the program. Some of the early pairing proved extremely successful and the original pairs finished the

PART I--Information and Project Description (cont.)

3. Describing Effectiveness (cont.)

b. (cont.)
program together. In other cases there were tutors, who did not believe in the "game aspect" approach to learning, but wanted to teach in a traditional fashion. The pressure was too much for their pupils and some of them asked to leave the program or to be changed to another tutor. Some of the tutors could not tolerate "acting out boys". Training helped many to accept and deal appropriately with the tasks at hand. If a child asked to leave the program because he could not relate to any of the tutors he was allowed to do so. However, other children were recruited to replace the ones who dropped out. The fifteen students chosen for evaluation were those who participated in the program from November to May. It is felt that the late comers also benefitted greatly, but statistical evidence is lacking. However, subjects were used as their own control. A seven month gain in all areas would be expected.

Out of those participating in the program, fifteen who had been involved the entire time from November to May were chosen for emotional evaluation. Twelve of these, for whom we had academic test scores, were also chosen for academic evaluation.

c. Students served as their own comparison groups.

d. The only special occurrences were described in "b", but these do not affect the test results as scores used are those of the children who participated for the entire program.

e. The following is a description of the data collected in 1973-74.

To evaluate training of tutors

1. Parquetry Design Tests administered in Nov.1972 and post-tested in May 1974 were given by the same two professional educators in both testings.

PART I--Information and Project Description (cont.)

3. Describing Effectiveness (cont.)

e. (cont.)

2. Anecdotal reporting by participating children. May, 1974.

3. Anecdotal material by tutors - throughout program.

4. Personality Tests

The pre and post evaluations by the professionals were statistically validated.

Nine tutors were evaluated. The nine tutors who were evaluated were the ones who finished the program last year, were rehired this year and are presently involved in the project. Two professional raters used a one to five scale; one indicating poorest (to judge the extent to which the tutor displayed the desired behavior in his interaction with the student). Of course, the two raters independently scored their observations. Inter-rater reliability = .78. The eight traits deemed essential for constructive tutorial relationships when working with the learning disabled student were:

1. Observe without interrupting

2. Intercede before a child meets too much frustration

3. Restate a question a student does not understand

4. Demonstrate to help the student

5. Use a non-directive approach to help students solve problems

6. Accept the onus when a child does not learn rather than create guilt in the child

7. Provide an atmosphere in which problem solving is within the reach of the child, such as accepting any given answer

PART I--Information and Project Description (cont.)

3. Describing Effectiveness (cont.)

e. (cont.)

8. Understand the difference between an ease level, frustration level and instructional level.

All of the tutors who entered the project were assigned a student with whom they were to perform ten tests of Parquetry Designs. As they performed the tests, the two raters scored them independently. The validity and reliability of the testers can be seen in the correlation of their scores. The two raters graded the senior citizens at the end of the program and again came up with a close correlation.

Personality tests were also administered to the seniors but these were not used for measurement purposes. Their main attributes were to ascertain if any traits would be applicable to matching them with students. More research has to be done on this before we can validate any findings.

In addition to the hard data, the tutors wrote reports on how they felt about their training and what the program had done for them personally.

To evaluate the academic skills of the children the following tests were administered:

	Pre Test	Post Test
Jastek Wide Range Achievement Tests	One form Nov.	One form May
Stanford Achievement Tests	Advance form A Oct.	Advance form B May
Gilmore Reading Test	Form C Nov.	Form D May
Evaluation of Communication Skills by Two Professionals	Nov.	May

The Jastek W.R.A.T. tested: Reading, Spelling and Arithmetic

PART I--Information and Project Description (cont.)

3. Describing Effectiveness (cont.)

e. (cont.)
Gilmore Reading Test tested reading accuracy and comprehension. Stanford Achievement Tests tested word meaning, spelling and arithmetic application.

These are commercial tests and have standardized validity and reliability. The Gilmore and W.R.A.T. tests were individually administered by the Project Director and her assistant. The Stanfords were administered by the school staff as standard procedure.

Anecdotal material was also collected from the children.

To determine the improvement in psychological well-being the following data was collected:

Test of Home Behavior -- completed at year's end by parents

Test of School Attitudes -- self-rated at year's end.

Anecdotal data substantiates the statistical data.

Home Behavior was validated by a t-statistic to measure significance of differences between correlated means. An analysis of overall mean differences across all four characteristics as well as analysis of mean differences for each characteristic was performed by Robert E. Matefy, research consultant.

School Attitude -- percentages of positive, same and negative changes were calculated by Mrs. Saul.

f. The results of the findings of each objective are stated below.

Findings related to effectiveness of tutor training

Across all eight traits, the mean rating before training was 28.6 (out of a possible score of 40). The mean rating

PART I--Information and Project Description (cont.)

3. Describing Effectiveness (cont.)

f. (cont.)
after training was 34.4. The differences between these means are significant ($t=5.12, df=8, p<.01$). The training and supervising program appears to have had a marked effect on the Senior Citizen's behavior while interacting with the student in a tutorial relationship.

When the ratings within each trait were statistically analyzed, the means differences were also statistically significant. A summary of the data is presented:

Observe without interruption

Pre-training mean rating = 3.6 (out of maximum score of 5)
Post-training mean rating = 4.2 (out of maximum score of 5)
($t=3.02, df=8, p<.05$)

Intercedes before frustrated

Pre-mean rating = 4.1
Post-mean rating = 4.7
($t=4.2, df=8, p<.01$)

Restates

Pre-mean = 3.5
Post-mean = 4.2
($t=3.3, df=8, p<.05$)

Demonstrates help

Pre-mean = 4.1
Post-mean = 4.4
($t=2.3, df=8, p<.05$)

Non-directive technique

Pre-mean = 2.9
Post-mean = 3.9
($t=5.4, df=8, p<.01$)

PART I--Information and Project Description (cont.)

3. Describing Effectiveness (cont.)

f. (cont.)

Accepts onus

Pre-mean = 3.3
Post-mean = 4.3
($t=6.9, df=8, p<.01$)

Atmosphere

Pre-mean = 3.8
Post-mean = 4.4
($t=4.4, df=8, p<.01$)

Understands difference

Pre-mean = 3.2
Post-mean = 4.3
($t=4.5, df=8, p<.01$)

Findings related to increasing academic skills of learning disabled students

Reading - The students' scores on the Wide Range Achievement Reading Test showed significant improvement from before to after the program ($t=3.34, df=11, p<.05$). Scores on the Gilmore Reading Test showed similar improvement before to after the program ($t=3.3, df=11, p<.05$). The S.T.E.P. students improved their reading skills to a significant degree during the year they participated in S.T.E.P.

Such differences in test scores cannot be attributed solely to normal growth or achievement, as demonstrated by the next set of scores. The Stanford Achievement tests were administered in October and May to all the seventh and eighth grade students as part of the regular school testing program. Whereas an almost seven month gain would be expected for the normal student, there was an average +14.3 month gain for the learning disabled S.T.E.P. students on word meaning.

PART I--Information and Project Description (cont.)

3. Describing Effectiveness (cont.)

f. (cont.)

Spelling - The students' scores on the Wide Range Achievement Test for Spelling showed significant improvement ($t=3.0, df=14, p < .05$). Such differences in tests scores before and after participation in S.T.E.P. are due to more than normal academic development as suggested by the Stanford Spelling Test scores which showed an average gain of 9.1 months in a less than seven month period. It is important to realize that the expected academic growth rate is the estimate for "normal students. The expected growth rate for the S.T.E.P. student would be much less.

Math - Scores on the math section of the Wide Range Achievement Test, although showing improvement, was not statistically significant. On the other hand, in a less than seven month test-retest period, mean differences on the Stanford Test for mathematic application showed average gains of 10.6 months.

Findings related to improving the psychological well-being of the learning disabled child

Home Behavior - The following percentage of gain was calculated from the ratings of home behavior by the parents of the children before and after involvement in S.T.E.P. The results of statistical analysis is also reported.

1. Maturity - 37.3% (Before S.T.E.P. mean rating =3, after S.T.E.P. mean rating =4.1; $t=4.64, df=16, p < .01$).

2. Cooperation - 33.3% (Before S.T.E.P mean rating =3, after S.T.E.P. mean rating =4; $t=4.8, df=16, p < .01$).

3. Gets along better with family - 26.1% (Before S.T.E.P. mean rating = 2.9, after S.T.E.P. mean rating = 3.6; $t=2.95, df=16, p < .01$).

4. Attitude toward school - 21.6% (Before S.T.E.P. mean rating = 3.2, after S.T.E.P. mean rating = 3.9; $t=2.8, df=16, p < .02$).

School Attitude - The following percentage of gain was indicated by the S.T.E.P. students.

1. Attitude toward school

PART I--Information and Project Description (cont.)

3. Describing Effectiveness (cont.)

f. (cont.)

59% like school more this year than last

27% like school the same

4% like school less

2. Attitude toward bus riding

50% liked to ride the bus more this year

45% liked to ride the bus the same

5% liked to ride the bus less

A few excerpts from tutors' reports are as follow:

--"it is surprising that this tutoring of 7th and 8th graders opens up a wider field of knowledge that has lain dormant for years. Thus you feel more alive and I hope useful in being helpful to others.

Now unconsciously I am interested in and read all articles I come across on children and teachers, also I am making real use of my dictionary. A new pupil is a challenge. What can we do to help him reach his goal in life - if he has never given it any thought, and many have not, your questions may arouse his interest and attention which is vital in teaching the young."

One tutor speaks about her observation of another tutor,

--"Observed one of the Senior Citizens helping child with puzzle. Tangrams, assorted cuts, etc. And she talked constantly to her. I wanted to say, 'Shut up', difficult to do without constant murmur, meant to be helpful but distracting. Had worked on

PART I--Information and Project Description (cont.)

3. Describing Effectiveness (cont.)

f. (cont.)

those puzzles myself. Not easy." She also states: "Did I enjoy it and think it was worth doing? Of course. At my age, insofar as possible, I do only what I enjoy doing. This means the bed may not get made between changes of linen and I may not eat dinner until 10 p.m., but who cares? Not me."

A retired draftsman who is alone points out that:

--"I find the S.T.E.P. program beneficial for myself and pupils. I have met a nice group of contemporary senior citizens. I am receiving an education in handling various types of hyperactive boys and girls and directing their activities into new schools of skills or thought. We are making various products for use in school activities which are too expensive to purchase commercially."

The anecdotal reports are filled with remarks of rewarding situations and what the tutors have done to help the children. When a person feels his own worth he is able to make change in others.

The children responded to the question, "Do you think the program should be continued next year?" as follows:

--"I like it because there are not ninety people there when you are and you can get your work and other stuff done."

--"I think that this program is marvelous and I like everyone in it. I am learning different things and I think this is helping me a lot."

--"It makes you hear sounds better -- the long and short vowels."

--"She's taught me how to make games better.. Because there was one game that was too easy and she made it a little harder, you know, so it turned out pretty good. ..we put words on it and if you miss the words you have to go back. We weren't going to do that so I learned something from that."

PART I--Information and Project Description (cont.)

3. Describing Effectiveness (cont.)

f. (cont.)

--"Writing the instruction to games helps you spell bigger words."

--"It kinda cools you down because sometimes you get sick of Science, English. Sometimes -- I don't know -- you really don't like some classes."

--"I think a lot of the kids should have the opportunity because a lot of kids have problems in science and stuff and some teachers they don't like so much. Like Mr._____ I don't get along with very good."

--"once I came to school I didn't really feel so hot about school but as it went along I thought it was a little better -- I used to get into trouble all the time around 6th grade and all. Now since S.T.E.P. is here I think I am learning more."

g. The following demonstrates the statistical extent to which each objective was obtained.

Findings related to effectiveness of tutor training

The significance of differences between the pre and post training ratings was analyzed by the t-statistical procedure for correlated means. First, the ratings across all eight tutor characteristics were analyzed for a total improvement score. Second, the differences in pre and post ratings for each of the eight characteristics were analyzed. Thus, we assessed total improvements due to training as well as improvement along specific traits.

Dr. Robert Matefy, clinical psychologist, served as the analyst of this data.

PART I--Information and Project Description (cont.)

3. Describing Effectiveness (cont.)

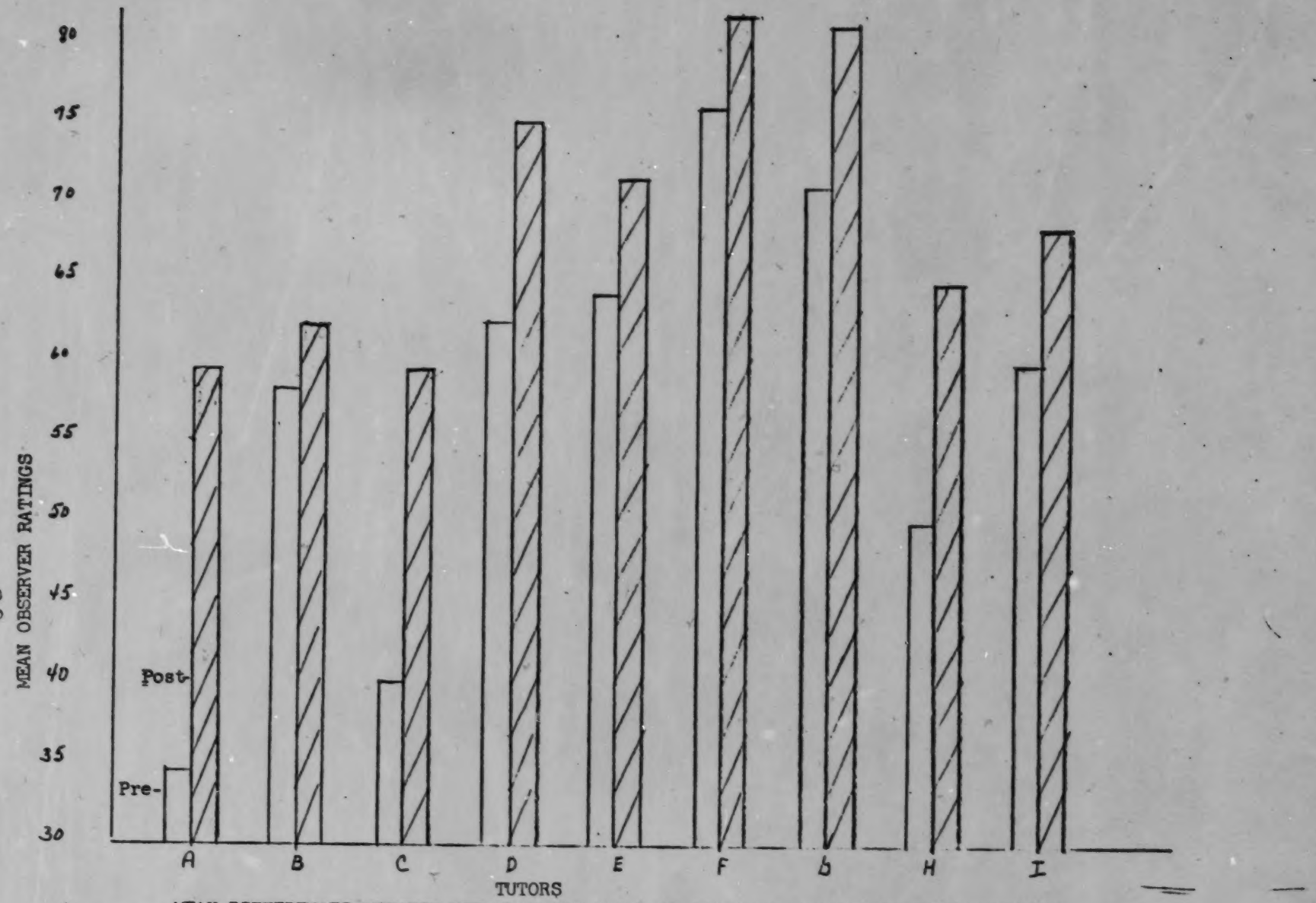
g. (cont.)

According to the mean differences between observers' ratings of tutors' behavior before training and after training, the tutors improved significantly in their teaching behavior along specific dimensions. When the raters' observations along all eight characteristics are pooled for an over-all rating the differences are statistically significant at least at the .01 level ($t=5.12, df=8, p < .01$). That is, there is less than 1 chance in 100 that the actual differences between the overall means might have arisen due to chance.

The tutors improved due to the training along all eight characteristics. The pre-post differences on Observe without interruption ($t=3.02, df=8, p < .05$) could occur by chance less than 5 in 100 times. Intercedes before frustration pre-post differences ($t=4.2, df=8, p < .01$) could occur by chance less than 1 in 100 times. Restates question mean differences ($t=3.3, df=8, p < .01$) have less than a 5 in 100 probability of occurring by chance. Demonstrates help mean differences ($t=2.3, df=8, p < .05$) could be due to chance factors in less than 5 in 100 times. Using non-directive technique mean differences ($t=5.4, df=8, p < .01$), Accepts onus differences in ratings ($t=6.9, df=8, p < .01$), and Provide atmosphere mean differences could happen by chance less than 1 in 100 times.

In sum, on all eight characteristics the mean differences between pre-post training observations could be attributed to chance factors less than 5 in 100 and 1 in 100 times.

The statistical significance of the reported findings has been reported in earlier items. The educational significance is clear also. Through a systematic program of training, using such educational and time-proven techniques as role-playing, group discussions, lectures, demonstrations, and on-site monitoring and intervention, retired Senior Citizens without any formal training in counseling or tutoring the learning disabled can be taught appropriate skills for effective tutoring. Validation of Objectives 2 and 3 will



MEAN DIFFERENCES BETWEEN PRE-TRAINING AND POST-TRAINING RATINGS OF TUTOR BEHAVIOR ACROSS ALL EIGHT TRAITS

PART I--Information and Project Description (cont.)

3. Describing Effectiveness (cont.)

g. (cont.)
demonstrate that not only did the tutors' effectiveness improve with training, but their interactions with the students produced positive and significant changes in the students' academic development and psychological well-being.

Findings related to increasing academic skills of learning disabled students

For the WRAT and Gilmore, the same subjects were measured before and after the program. Therefore, the two samples were correlated and the measurings repeated. The t-test of significance for differences between correlated means was the statistical treatment of choice.

Dr. Ronald Raymond, who was consulting research psychologist at the time, was responsible for the data analysis. He is a staff member of Silver Hills Psychiatric Hospital and a clinical psychologist.

Mrs. Rosalie Saul tabulated the average monthly gains for the S. A. T. scores and offered the comparisons between actual and expected growth rates.

Reading - On the Gilmore Reading Test, students' performance indicated a significant improvement in reading accuracy before and after participation in S.T.E.P. ($t=3.3, df=12, p<.05$). On the reading section of the Wide Range Achievement Test there was also significant improvement before and after the program ($t=3.34, df=11, p<.05$). These changes in the learners can be attributed to chance factors less than 5 in 100 times. Additional evidence suggests that improvement in reading ability was beyond the growth patterns of normal students. The average gain on the Stanford Achievement Test for word meaning was +14.3 months even though the test-retest period was only seven months. The expected growth rate of children with learning problems is usually less than that for other children.

PART I--Information and Project Description (cont.)

3. Describing Effectiveness (cont.)

g. (cont.)

Spelling - The S.T.E.P. students showed significant improvement in the spelling section of the WRAT administered before and after participation in the program ($t=3.0, df=14, p < .05$). The score differences cannot be attributed to chance factors alone. The average gain on the Stanford Spelling Test was +9.1 months in less than a seven month test-retest period suggesting that the S.T.E.P. learning disabled students' gain was more than expected for normal children during the same time period.

Math - The improvement shown on the WRAT for math was not large enough to be attributed to other than chance factors. However, scores on the Stanford Test for mathematical application showed a +10.6 month gain over only a seven month period. This represents a 3.6 month gain over and above that expected for normal students. The gain would probably be even greater if compared to the expected growth rate for learning disabled children.

The statistical significance of the reported findings have been discussed in earlier items. The educational significance is quite obvious. The S.T.E.P. student was referred to the program because he "failed" in the regular classroom situation. His learning disabilities and concomitant social-emotional problems made adjustment to the regular classroom difficult. The evidence strongly suggests that the unique features of S.T.E.P. provides an atmosphere conducive to learning for this type of student. Employing Senior Citizens as tutors in a school has many inherent advantages for this neglected segment of the population. In a sense, both the learning disabled child and the Senior Citizen have been rejected by society. Working together, they seem to provide a mutually beneficial relationship. Anecdotal data, described elsewhere, demonstrates the benefits of involvement in S.T.E.P. for the Senior Citizen.

PART I--Information and Project Description (cont.)

3. Describing Effectiveness (cont.)

g. (cont.)

Findings related to improving the psychological well-being of the learning disabled child

Home Behavior - Since a before program -- after program comparison was made in the same subjects, a t-statistic to measure significance of differences between correlated means was used. An analysis of overall mean differences across all four characteristics as well as analysis of mean differences for each characteristic was performed by Robert E. Matefy, research consultant.

School Attitude - Percentages of positive, same and negative changes were calculated by Mrs. Rosalie Saul.

Home Rating of Socially Acceptable Behavior - According to ratings by parents, the S.T.E.P. students improved significantly on all four traits tapping socially acceptable behaviors. This improvement occurred during the time the student participated in S.T.E.P. The overall mean rating for all four traits before S.T.E.P. = 12.1. After S.T.E.P., the overall mean rating = 15.7. The statistical results ($t=5.5, df=16, p < .01$) indicated that these differences could be due to chance less than 1 in 100 times. The mean differences of each trait (Maturity, Cooperation, Getting along with family, Attitude toward school) also indicate that chance factors are unlikely. There are less than 1 in 100 and 2 in 100 probabilities that the differences in ratings between before S.T.E.P. and after S.T.E.P. are due to chance factors.

School Attitude - As indicated previously, S.T.E.P. students reported a gain in favorable attitudes toward such school-related items as school itself, bus riding, homework and their report cards. In terms of percentages, from 38% to 59% of the students showed gains in their school related attitudes since their involvement in S.T.E.P. This compares with from 4% to 12% who indicated less favorable attitudes since their S.T.E.P. involvement. Although the data was not analyzed statistically, it is clear that more students held positive self-proclaimed attitudes toward school after S.T.E.P. than before S.T.E.P.

PART I--Information and Project Description (cont.)

3. Describing Effectiveness (cont.)

g. (cont.)

Home Behavior - The statistical significance of the reported findings have been discussed in earlier items. Briefly, the parents rated their children's socially acceptable behavior as significantly improved from before to after participation in S.T.E.P. The mean differences could be attributed to chance factor less than 1 or 2 in 100 times.

The findings strongly suggest that S.T.E.P. has a profound effect not only on academic development, but also on personal development -- as seen in the improved socially acceptable behavior of the youngsters at home. We need not elaborate here the well-established fact that academic and personal development are inextricably intertwined. Educational projects must account for growth in both areas of functioning. This is even more important when the learning disabled student is involved. Plagued by failures and rejections which become internalized into his self-concept, the learning disabled student requires the accepting and nurturing atmosphere provided by the S.T.E.P. tutor for academic and personal growth. As noted earlier, in essence, both the Senior Citizen and the learning disabled child have been rejected by society. Their interactions in a tutorial situation have proven beneficial for the student. Anecdotal material presented elsewhere in this report describe the benefits that such involvement have for the Senior Citizen.

School Attitudes - The findings of the students' self-reported attitudes toward school related activities were reported in percentage of gain. They suggest improvement in favorable reactions to such activities as school itself, bus riding, homework and report cards.

As part of the objective to increase psychological well-being S.T.E.P. aimed to develop self-confidence, and self-esteem in the student's feelings about his academic abilities. Rather than seeing school as an aversive place associated with

PART I--Information and Project Description (cont.)

3. Describing Effectiveness (cont.)

g. (cont.)
rejection and failure, we wanted to provide a positive situation, where students could feel accepted and positive toward the learning process. The results suggest that many students indeed began seeing school related activities in a more positive light.

Again, we realize that attitude toward school and school performance are closely related. The learning disabled student must begin viewing school as a rewarding situation so that he can take advantage of the educational opportunities it offers. So often, after repeated misfortune, the L.D. student withdraws from academic activities and becomes unreceptive to any remedial program at all. S.T.E.P. seems to have been able to avoid this dilemma.

h. The advantages of this program are:

--There are enough tutors to provide each child with an individual to whom he can relate.

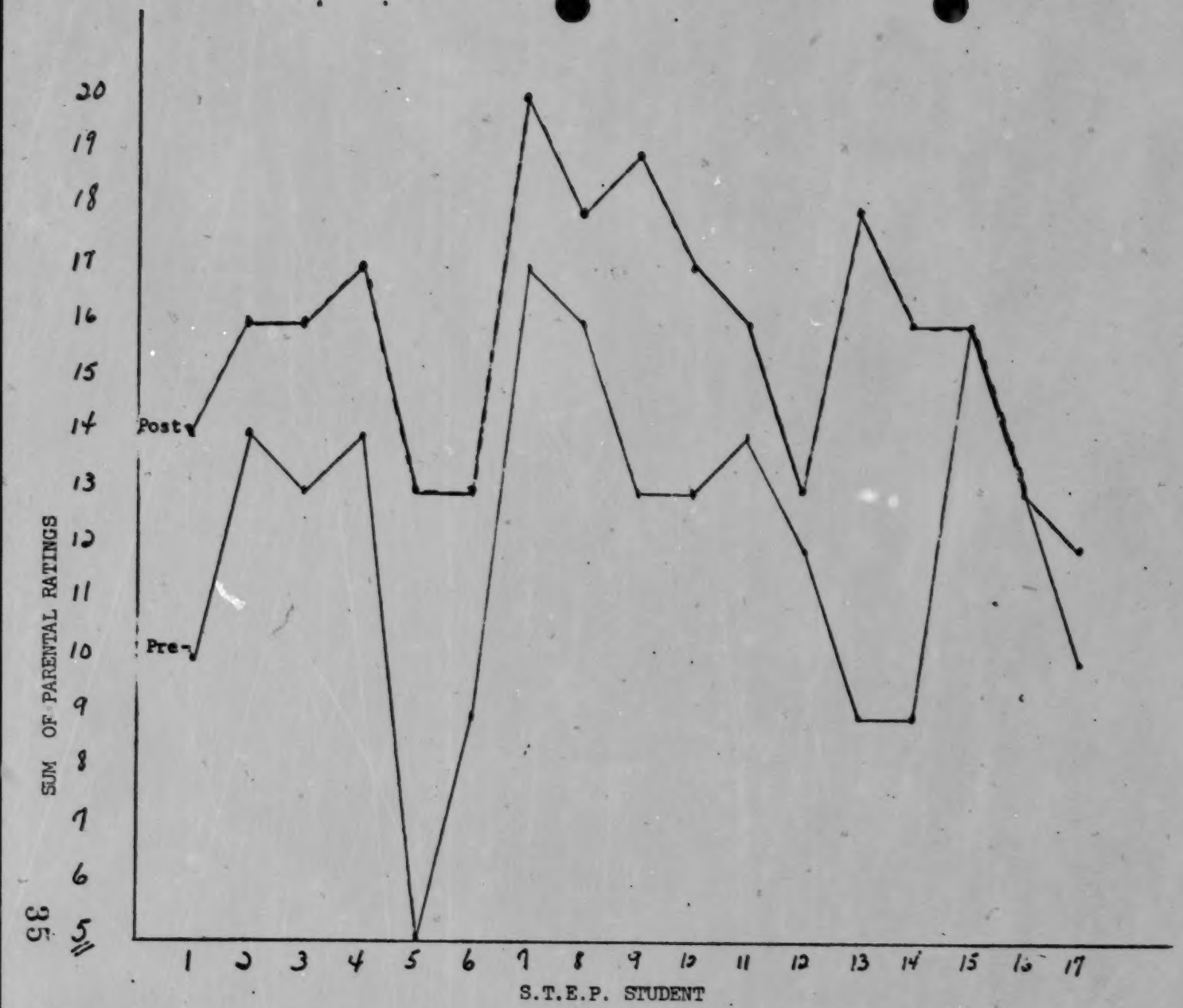
--The program is flexible enough to keep a child from one period to an entire day in a one-to-one relationship.

--The program fosters psychological improvements because the tutors provide an accepting and nurturing learning atmosphere which facilitates the learning process.. In addition, the child learns to like school and it to like him. The same outcome is true of his home.

--The program fosters academic gains because the student becomes a surrogate teacher and research has proved that the teaching provides an important vehicle for learning. One can only create a teaching aide when one knows something of the subject matter himself.

--Most seniors are more amenable to training as they no longer have pre-conceived notions of educational methods.

--The program is economical. If the same children were to be handled in a self-contained situation it would require three regular learning disability teachers which



DIFFERENCES BETWEEN PRE-STEP AND POST-STEP RATINGS OF HOME BEHAVIOR ACROSS ALL FOUR TRAITS FOR STUDENTS WHO WERE IN PROGRAM IN MAY.

PART I--Information and Project Description (cont.)

3. Describing Effectiveness (cont.)

h. (cont.)
would come to approximately $36,000 plus two aides for $12,000 for a total of $48,000. In this program, we are able to provide twenty-five children the necessary help with one learning disability teacher for $12,000 and $4,464 worth of tutor time.

--Additional money to pay Senior Citizens is available from other agencies. The present project has been partially funded by Project Mainstream in Danbury which pays four of the tutors their salaries. Since labor department monies are available in the various towns each town could probably receive some of these funds if the senior citizens in their towns meet the Department's guide lines.

--The project helps seniors to understand the educational needs of the community which may thereby acquire their support for school budgets.

--Children are provided with foster grandparents to whom they are able to relate better than they relate to their own parents or to others of that age. Haim Ginott, a leading Child Psychologist, says that the grandparent-grandchild relationship may be good because parents are a common enemy for both children and grandparents.

--Educational materials which are in short supply due to rising costs and decreasing budgets are now available to elementary teachers at no charge.

--Self-esteem is being fostered in the adolescent as he become a big sister or brother for the primary child.

--Support for schools comes from parents who are educated in understanding the learning process as well as the emotional "hang-ups" of their individual children.

--Any town should be able to replicate this project as the main ingredients are senior citizens and handicapped adolescents.

PART I--Information and Project Description (cont.)

4. Describing Costs

1973-74 was a pilot year and the project operated on a very limited budget of $23,000. The director's salary was based on a three day week, the seniors received no reimbursement during the training period and once hired were paid $2.50 a working period. A tutor might come in for a whole day but receive only $5.00. (he worked with two children, one period each). No senior came more than three days a week. In addition to the director and senior tutors, materials were purchased, a part-time secretary employed, a consulting psychologist hired, data collected and proposals and reports written.

Experience has proved that once the project is in operation, the tutors and a coordinator should be at the site daily unless a school can provide alternatives for their children on the days this project is not in operation.

The tutors should be reimbursed for transportation and lunches during the training period. This might be provided by R.S.V.P. (a branch of the Department of Aging) or Project Mainstream (a branch of the Department of Labor). These agencies operate differently in various towns.

The first part of the year (approximately six months) should be spent in training one or more professionals from a school. Release time would be provided by the adopting institution for their personnel to attend workshops and observations. These coordinators will also require time to recruit and screen senior tutors. The budget for the adopting school would be:

1 coordinator two days per week of a half year or thirty-six days.

A substitute for this coordinator would cost - $900.00

Transportation to Redding (possibly forty miles) once a week for thirty-six weeks at 12¢ a mile - 172.80

PART I--Information and Project Description (cont.)

4. Describing Costs (cont.)

The coordinator after the 36 weeks should be ready to start a pilot project at his school. The budget must then include salaries for the tutors which would be 25 man hours per day, 5 days a week, for 36 weeks --------$4,500.

Based on these figures an adopting school would spend:

Coordinator's substitute	$900.00
Transportation	172.80
Additional salary for coordinator	1,000.00
Tutors (unless some are funded by another agency)	4,500.00
Materials	1,000.00
Office supplies	300.00
Postage	100.00
Printing	100.00
Evaluation	1,000.00
Secretarial work	1,000.00
Public relations, senior and parent meetings	500.00
	$10,572.80

The above is a first year budget. The second year should produce a program for 25 handicapped junior or senior high school pupils with one teacher and $9,000 worth of tutor time. Some of this may be funded through other channels.

The producer school will do the following:

Administer the project for which a director's salary is - $23,000.

Conduct the model which will require a coordinator for $12,000 per year.

Secretarial services - $6,000.

Rental of rooms at the Redding School - $2,000.

PART I--Information and Project Description (cont.)

4. Describing Costs (cont.)

Conduct ~~36~~ 18 full day workshops which will require 18 full day consultants - $1,800.

Evaluate the projects - $5,000.

Tutors - $9,000.

Materials for training

1. Portable TV camera
2. Two tape recorders and ear phones
3. Two cameras
4. Art supplies
5. Materials such as film, tapes, etc. for a total of $4,000
6. Materials for two manuals - $8,000

The space being used at the John Read Middle School is poor and needs revamping. An estimate is being obtained for some sort of remodeling procedure.

The total costs for the producing school will be $70,800. plus the architectural changes.

5. Describing Exportability Factors

The sequence of events necessary for adoption by another district would be:

1. To choose an appropriate coordinator and staff to carry on the program
2. To provide workshops and materials for the training of coordinator and staff that they are able to:

PART I--Information and Project Description (cont.)

5. Describing Exportability Factors (cont.)

a. recruit, screen and train senior citizens

b. effectively communicate with faculty, students and parents

c. develop new techniques for use by the seniors and their pupils

d. screen students

e. match tutors and tutees

f. elicit orders for materials from elementary school teachers

g. obtain funds from other sources to pay the tutors.

Personnel to run the workshops might be available in the various cooperating districts. However, if personnel cannot be so obtained, outsiders must be hired.

The workshop staff should include:

1. A psychologist whose background helps him to understand the needs of the elderly as well as the young.

2. A social worker to help recruit as well as train the seniors. His services would also be available to the children, parents and teachers in all of the participating schools.

3. Educators, skilled in producing learning materials.

As tutors are hired schedules will be developed for the various coordinators and their tutors to attend workshops designed for senior training and for observations of the model project. Six to ten coordinators could probably form an effective workshop.

PART I--Information and Project Description (cont.)

5. Describing Exportability Factors (cont.)

The coordinator of a district will spend one day a week at the workshops and another day a week recruiting and training seniors, screening children, informing parents and the community about the project. This gives the coordinator of the adopting agency two days of work a week on the project with the balance of his time available for his normal duties. By February a pilot project should start to function in each school.

The producer will then send its staff to the adopting agencies to give on-site support and direction. This is a relatively simple project to replicate and one which is appealing to others than educators in a community.

6. Publications and Materials

The project has sample pages of two manuals it hopes to develop. They are entitled:

A Training Program for Senior Citizens In Tutoring Handicapped Adolescents

Learning Aides Produced by Adolescents for Elementary Schools

Writing, photography and printing will have to be sent out for bid. However, a rough estimate would be approximately $4.00 per manual.

7. Unanticipated Outcomes and Spinoff Findings

The most dramatic spinoff is the appeal that the project has had for the public and press. Little publicity has been solicited, but photographers and news men seem always to be on the scene. Articles have appeared in Connecticut Education, The New York Times, The Common, The National Enquirer, and A.P. release, Danbury News Times (four pages in the Sunday Magazine Section), Redding Pilot (numerous articles), Bridgeport Post, and many others.

PART I--Information and Project Description (cont.)

7. Unanticipated Outcomes and Spinoff Findings (cont.)

Radio stations in Danbury, Brookfield and Stamford also gave considerable time to the project.

The sociological aspects of joining two rejected groups of people deserves further study. When one enters the room one recognizes the support that the elderly give each other which in turn seems to be communicated to the young.

The teachers and tutors have an excellent relationship. Two of the tutors each gave the school a book for Christmas, another has been bringing house plants, which he propagates, to various teachers. The teachers in turn send cookies made in Home Economics to the tutors, share interesting art projects with them and accept them as part of the family. Seniors chaperoned field trips for the Music and English Departments. This provided recreation for the tutors and they served a useful function to the school. The John Read Middle School should feel pride in the community it has developed.

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Project objective(s) identified for validation have been attained and the performance of the learners has been improved.

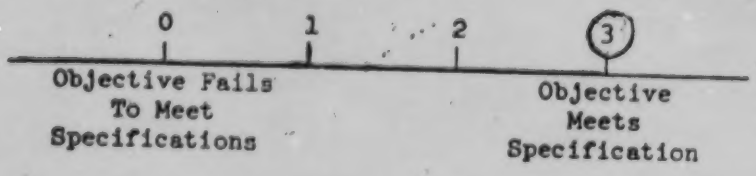
Objective No. 1

1. Review the structure of the objectives presented in Application for Validation, Part II. Determine if the objective contains the necessary specifications to render it measurable at a given point in time. The specification must include: (1) who is able to do what, (2) at what level of performance, and (3) under what conditions. Any objective not meeting the necessary specifications of measurability must be eliminated from further investigation and validation. Include an explanation of the deficiencies. If the objective to be eliminated is crucial to the significance of the project or the practice under validation, a meeting of the entire validation team should be called at this point to determine whether further validation of the project or practice is warranted.

Validation of Evidence:

As a result of a program of inservice education, senior citizens taught to tutor educationally handicapped students will show statistically significant gains in such skills as observing without interruption, interceding before frustration, restating, demonstrating help, using non-directive techniques, accepting onus, providing an accepting atmosphere, and understanding individual differences when rated by qualified specialists through pre and post observations of tutor performances on an experimental task.

Rating of Evidence:
(Circle appropriate number)



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

2. Examine and verify the needs assessment procedures and findings for the nominated objective and determine the adequacy of the evidence of need to justify the selection of the objective.

Validation of Evidence:

Since this demonstration project proposed to investigate the feasibility of directly involving retired citizens in a useful and instructional relationship with underachieving adolescents, it was necessary to determine if training could provide tutors with the necessary skills to work with the handicapped.

Rating of Evidence:

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

3. Examine and verify the activities (methods, strategies, program intervention, etc.) employed to accomplish the objective. Verify the intensity of each method in terms of full-time equivalent professional and nonprofessional personnel required, hours of instruction, etc.

Validation of Evidence:

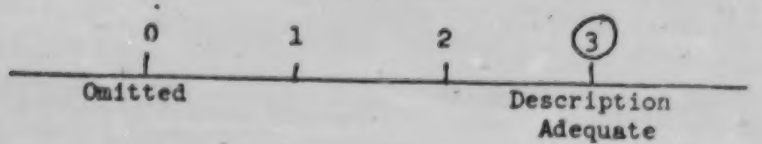
The Senior Citizens were exposed to the following training procedures, in order presented:

A. Observations of classroom techniques, teaching methods, etc. by attending classes at the elementary, middle and high school levels.

B. Group discussions led by the professional staff which included the program director and a psychological consultant. In addition to conveying information, the group discussions aimed to develop a feeling of group belongingness or of membership in a meaningful peer group which was deemed essential for the Senior Citizens' personal well-being. Topics covered were: potential problems in the tutor-tutee relationship; the nature of the teaching relationship; causes of disabilities; concomitant emotional factors; sensory motor techniques for training; the role of creativity, task breaking; setting limits; developing behavorial contracts; personal feelings about one's strengths and weaknesses as a tutor, feedback about the strengths and weaknesses of the program as seen by the tutors. A common discussion topic was solutions to problems that group members were experiencing. Such discussions occurred almost daily at a regular time period.

C. Lecture series including such topics as the importance of listening to the child and the psychological aspects of the handicapped presented by professionals.

Rating of Evidence:



PART II--Validation of Evidence On Effectiveness/Success (cont.)

Objective No. 1

3. Describe activities for the attainment of the objective: (cont.)

D. All kinds of reading material were made available and reading was encouraged as was the sharing and exchanging of materials.

E. Role playing was an essential aspect of the training program. For didactic and personal growth purposes, the Senior Citizen played the various roles of the tutor, student, classroom teacher. Role-reversal procedures were used to enhance understanding. Corrective feedback by the professionals and the group followed each role-playing session.

F. Direct intervention during a trial tutorial session. The professional staff, and especially Mrs. Saul, constantly monitored the tutorial interactions to offer assistance and to provide immediate (and discreet) feedback.

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

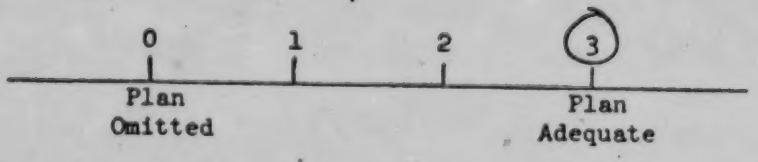
4(a). Each objective must have an evaluation design which will provide the information necessary to determine if the learner change occurred at the levels specified in the objective.

Review the evaluation design for each objective for the purpose of determining that implementation of the design yielded information for rendering conclusions about the attainment of the objective. (In the absence of such a design, the validator should eliminate the objective from further investigation and discuss the discrepancies encountered in the evaluation design.) If the objective to be eliminated is crucial to the significance of the project or practice under validation, a meeting of the entire validation team should be called at this point to determine whether further validation of the project or practice is warranted.

Validation of Evidence:

A pre-test - post-test design was utilized to test achievement of the specific components of the objectives.

Rating of Evidence:



On-Site Validation Form

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

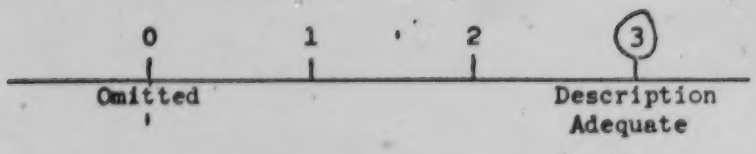
4(b). Review the evaluation procedures for each objective. The description of the procedures should include who did what to whom, how, when, and under what conditions to collect evaluative data.

Validation of Evidence:

Two professional observers, each experienced in teaching the learning disabled student, observed each tutor interacting with a youngster. To control for task specificity, the tutor's assignment was to teach the student to copy 10 parquetry designs. The tutor's interactions were rated on eight behavorial criteria: (1) observe without interruption, (2) intercede before a child meets too much frustration, (3) restate a question a student does not understand, (4) demonstrate to help the student, (5) use a non-directive approach to help student solve problem, (6) accept the onus when a child does not learn, rather than create guilt in the child, (7) provide an atmosphere in which problem solving is within the reach of the child, such as accepting any given answer, (8) understand the difference between an ease level, a frustration level, and an instructional level.

Observations were conducted before and after the training period to ascertain its effect on tutor behavior.

Rating of Evidence:



On-Site Validation Form

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

4(c). Review the evidence that supports the project's claim that the project activities were the cause of the attainment of the objective(s).

When control group(s) or norms are used for purposes of comparison, the data should convincingly demonstrate that the differences reported are attributable to project intervention, not to normal growth or achievement.

Validation of Evidence:

Across all eight traits, the mean rating before training was 28.6 (out of a possible score of 40). The mean rating after training was 34.4. The differences between these means are significant ($t=5.12, df=8, p<.01$). The training and supervising programs appears to have had a marked effect on the Senior Citizen's behavior while interacting with the student in a tutorial relationship.

When the ratings within each trait were statistically analyzed, the means differences were also statistically significant. A summary of the data is presented:

Observe without interruption

Pre-training mean rating = 3.6 (out of maximum score of 5)
Post-training mean rating = 4.2 (out of maximum score of 5)
($t=3.02, df=8, p<.05$)

Intercedes before frustrated

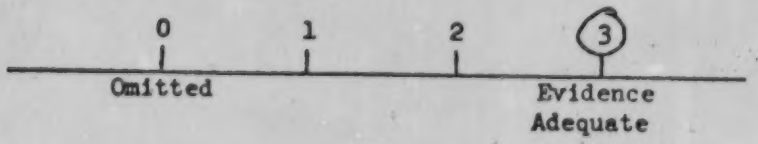
Pre-mean rating = 4.1
Post-mean rating = 4.7
($t=4.2, df=8, p<.01$)

Restates

Pre-mean = 3.5
Post-mean = 4.2
($t=3.3, df=8, p<.05$)

Demonstrates help

Pre-mean = 4.1
Post-mean = 4.4
($t=2.3, df=8, p<.05$)



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

4(c). (continued)

Non-directive technique

Pre-mean = 2.9
Post-mean = 3.9
($t=5.4, df=8, p<.01$)

Accepts onus

Pre-mean = 3.3
Post-mean = 4.3
($t=6.9, df=8, p<.01$)

Atmosphere

Pre-mean = 3.8
Post-mean = 4.4
($t=4.4, df=8, p<.01$)

Understands difference

Pre-mean = 3.2
Post-mean = 4.3
($t=4.5, df=8, p<.01$)

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

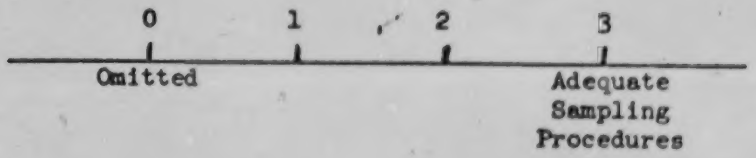
4(d). Review the sampling technique used for each objective. Verify the reported sample size, selection techniques, margin of error, and confidence limits and determine its appropriateness.

If sampling was not used, write NA (not applicable) in the space marked 4(d) on the Effectiveness/Success Summary Sheet.

Validation of Evidence:

NOT APPLICABLE

Rating of Evidence: - No rating.



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

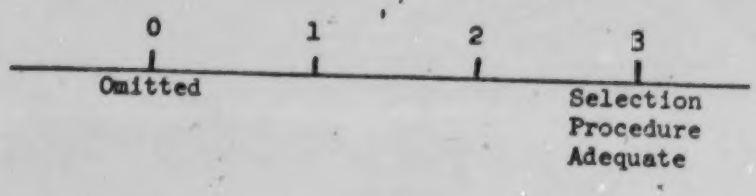
4(e). Review the procedures used to select control groups. Verify that the procedures used do not violate the underlying assumptions of a "control group."

Where procedures are "not applicable," write NA in the space marked 4(e) on the Effectiveness/Success Summary Sheet.

Validation of Evidence:

NOT APPLICABLE

Rating of Evidence: No rating.



On-Site Validation Form

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

4(f). Examine and verify the instrument's validity, reliability, and sensitivity to measure the range, scope, and nature of the behavior measured and determine the adequacy of the instrument used.

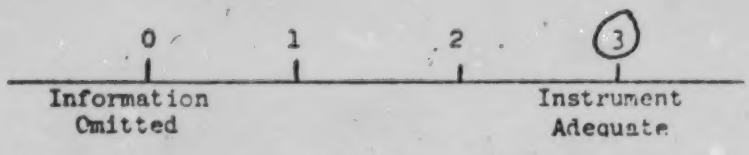
Validation of Evidence:

The two professional raters used a 1 to 5 scale (1 indicating poorest demonstration) to judge the extent to which the tutor displayed the desired behavior in his interactions with the student. The two raters, of course, scored their observations independently.

Inter-rater reliability = .78

The eight traits, deemed essential for constructive tutorial relationships when working with the learning disabled student were:

1. Observe without interruption
2. Intercede before a child meets too much frustration
3. Restate a question a student does not understand
4. Demonstrate to help the student
5. Use a non-directive approach to help student solve problem
6. Accept the onus when a child does not learn, rather than create guilt in the child
7. Provide an atmosphere in which problem solving is within the reach of the child, such as accepting any given answer
8. Understand the difference between an ease level, a frustration level, and an instructional level.



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

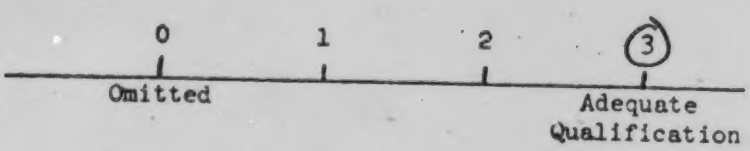
4(g). Persons responsible for data collection should be qualified for their tasks. Review, by objective, the tasks performed in the data collection process and those competencies (either stated or implied) required to perform those tasks.

If there was no evidence, ask for this information. Identify instruments administered by persons not qualified.

Validation of Evidence:

The first rater, Mrs. Rosalie Saul, is an experienced remedial teacher of learning disabled students. The second rater, Miss Terry Pica, holds a Master's degree in speech therapy, and has much experience in the field of learning disability and remediation. The two observers checked the listed characteristics on a 1 to 5 scale as the tutor sat with the student who was asked to copy 10 parquetry designs.

Rating of Evidence:



PART II--Validation of Evidence on Effectiveness/Success (cont.)

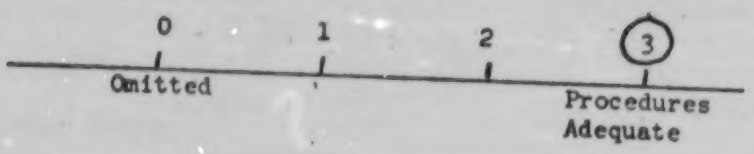
Objective No. 1

4(h). Review data verification procedures used for assuring the accuracy of data for each objective. The description should include the nature of and degree to which data verification procedures were used to detect and correct errors in data management.

Validation of Evidence:

The two raters had several discussions to reach agreement on behavioral definitions of the eight listed characteristics. Then they role-played several task situations and compared their judgements of the several criteria to detect discrepancies. Of course, the actual ratings were conducted independently to assure objective data gathering. The ratings of the two judges were correlated to assess the degree of agreement.

Rating of Evidence:



On-Site Validation Form

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

4(i). For each objective, there should be one or more appropriate data analysis procedure(s) to determine the extent to which objectives were attained.

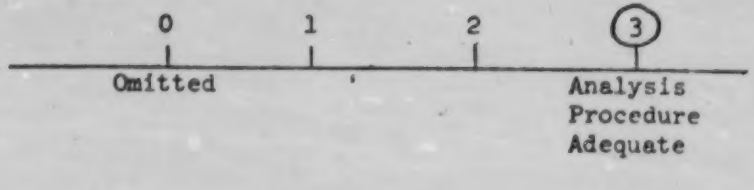
Review the data analysis procedure(s) for the objective. Identify any objective for which there was no provision for analysis of data or for which the analysis procedure was inappropriate. Explain the inappropriateness. Invalidate all conclusions based on such analysis. If conclusions are invalidated and that objective eliminated from validation, a meeting of the entire validation team should be called to determine whether further validation of the project or practice is warranted.

Validation of Evidence:

The significance of differences between the pre and post training ratings was analyzed by the t-statistical procedure for correlated means. First, the ratings across all eight tutor characteristics were analyzed for a total improvement score. Second, the differences in pre and post ratings for each of the eight characteristics were analyzed. Thus we assessed total improvement due to training as well as improvement along specific traits.

Dr. Robert Matefy, clinical psychologist, served as the analyst of this data.

Rating of Evidence:



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

5. The evaluation findings reported for each objective in the Application for Validation should give acceptable quantitative evidence that the learner performance attainment was met as expected. Verify that the attainment level for each objective was reached and cite the appropriate evidence.

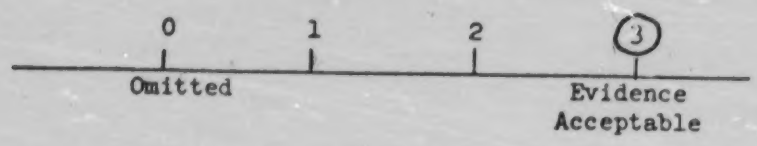
   Objectives failing the criterion must be eliminated from further consideration. If the objective is eliminated, a meeting of the entire validation team should be called to determine if the objective was crucial to the significance of the project or practice under validation. Upon such determination, the entire project or practice should be rejected from further validation.

Validation of Evidence:

According to the mean differences between observers' ratings of tutors behavior before training and after training, the tutors improved significantly in their teaching behavior along specific dimensions. When the raters' observations along all eight characteristics are pooled for an over-all rating, the differences are statistically significant at least at the .01 level ($t=5.12, df=8, p<.01$). That is, there is less than 1 chance in 100 that the actual differences between the overall means might have arisen due to chance.

The tutors improved due to the training along all eight characteristics. The pre-post differences on Observe without interruption ($t=3.02, df=8, p<.05$) could occur by chance less than 5 in 100 times. Intercedes before frustration pre-post differences ($t=4.2, df=8, p<.01$) could occur by chance less than 1 in 100 times. Restates question mean differences ($t=3.3, df=8, p<.01$) have less than a 5 in 100 probability of occurring by chance. Demonstrates help mean differences ($t=2.3, df=8, p<.05$) could be due to chance factors in less than 5 in 100 times. Using non-directive technique mean differences ($t=5.4, df=8, p<.01$), Accepts onus differences in ratings ($t=6.9, df=8, p<.01$), and Provide atmosphere mean differences could happen by chance less than 1 in 100 times.

Rating of Evidence:



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

5. (Continued)

In summary on all eight characteristics, the mean differences between pre-post training observations could be attributed to chance factors less than 5 in 100 and 1 in 100 times.

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 1

6. The evaluation supports the conclusion that the associated learner change implicit in the attainment of the objective was directly associated with project activities. Examine the conclusions drawn from the evaluation evidence for the objective for the purposes of verifying that the evidence supports the probability that learner change was associated with project activities; examine the conclusions to determine the generalizability of the findings.

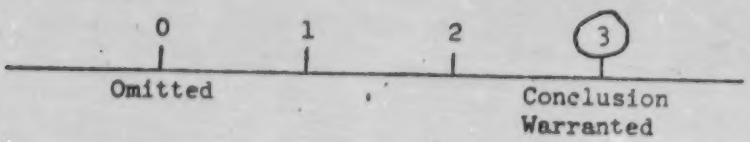
   Objectives failing the criterion must be eliminated from further consideration.

Validation of Evidence:

The training program succeeded in improving the effectiveness of the Senior Citizens in tutoring learning disabled students. Based on pre and post training period observer ratings of the tutors' behaviors as they interacted with students being taught to copy parquetry designs, the tutors improved significantly along all eight dimensions deemed important not only for that particular experimental task, but for all tutorial interactions ($t=5.12, df=8, p<.01$). Statistical analysis of ratings on each specific trait showed similar results. For experimental purposes to control for specificity of task demands, one task was used to compare pre and post behavior. However, the task demanded tutorial interactions which parallel requirements of all tutorial interactions taking place in S.T.E.P.

The gain in skills has support in other types of concurrent ratings. Observations by the staff of the tutors in action, their self reports as well as the evaluation of the tutors by the students.

Rating of Evidence:



PART II--Validation of Evidence on Effectiveness/Success (cont.)

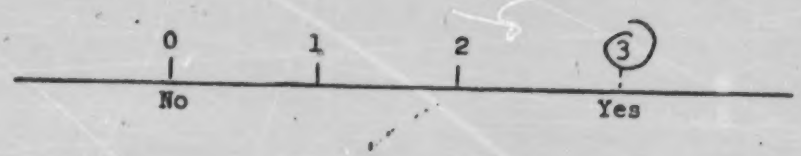
Objective No. 1

7. Review and verify the evidence supporting the conclusions that the findings for each objective are (a) statistically and (b) educationally significant.

Validation of Evidence:

The statistical significance of the reported findings has been reported in earlier items. The educational significance is clear also. Through a systematic program of training, using such educational and time proven techniques as role-playing, group discussions, lectures, demonstrations, and on-site monitoring and intervention, retired Senior Citizens without any formal training in counseling or tutoring the learning disabled can be taught appropriate skills for effective tutoring. The achievement of the other two objectives has also demonstrated that not only did the tutors' effectiveness improve with training, but their interactions with the students produced positive and significant changes in the students' academic development and psychological well-being.

Rating of Evidence:



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Project objective(s) identified for validation have been attained and the performance of the learners has been improved.

Objective No. 2

1. Review the structure of the objectives presented in Application for Validation, Part II. Determine if the objective contains the necessary specifications to render it measurable at a given point in time. The specification must include: (1) who is able to do what, (2) at what level of performance, and (3) under what conditions. Any objective not meeting the necessary specifications of measurability must be eliminated from further investigation and validation. Include an explanation of the deficiencies. If the objective to be eliminated is crucial to the significance of the project or the practice under validation, a meeting of the entire validation team should be called at this point to determine whether further validation of the project or practice is warranted.

Validation of Evidence:

As a result of being tutored by Senior Citizens, learning disabled students will show statistically significant gains on the Stanford Achievement Test, The Wide Range Achievement Test and the Gilmore Reading Test, and that 50% of these children will show gain of more than 3/4 of a grade equivalent score.

Rating of Evidence:
(Circle appropriate number)

On-Site Validation Form

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

2. Examine and verify the needs assessment procedures and findings for the nominated objective and determine the adequacy of the evidence of need to justify the selection of the objective.

Validation of Evidence:

Since all of the children in this program are functioning below their potential, an attempt was made to increase their academic functioning in areas in which each was weak. The basic skills of reading, spelling, communication, and arithmetic were the chosen areas tested.

Rating of Evidence:

On-Site Validation Form

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

4(a). Each objective must have an evaluation design which will provide the information necessary to determine if the learner change occurred at the levels specified in the objective.

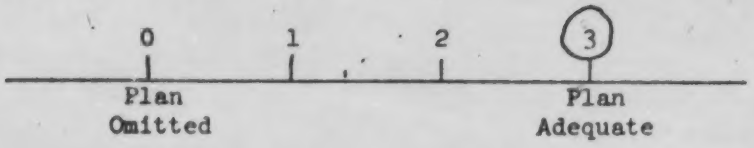
Review the evaluation design for each objective for the purpose of determining that implementation of the design yielded information for rendering conclusions about the attainment of the objective. (In the absence of such a design, the validator should eliminate the objective from further investigation and discuss the discrepancies encountered in the evaluation design.) If the objective to be eliminated is crucial to the significance of the project or practice under validation, a meeting of the entire validation team should be called at this point to determine whether further validation of the project or practice is warranted.

Validation of Evidence:

The basic evaluation design for 1973-74 was a pre-post testing program. Standardized tests tapping several academic areas (Reading, Spelling, Math) were administered at the beginning and end of the academic year.

A pre-test-post-test evaluation design was utilized. The gains were also compared against those expected by national norms.

Rating of Evidence:



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

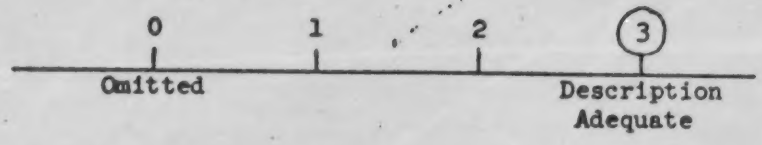
4(b). Review the evaluation procedures for each objective. The description of the procedures should include who did what to whom, how, when, and under what conditions to collect evaluative data.

Validation of Evidence:

The Jastek Wide Range Achievement test and the Gilmore Reading Tests were administered to the S.T.E.P. students before and after participation in S.T.E.P. They were administered individually in a familiar classroom setting isolated from extraneous noise. The testing for both occasions was done by members of the professional staff who were experienced in teaching the learning disabled student.

The Stanford Achievement Tests were routinely administered in October and May by the school staff.

Rating of Evidence:



On-Site Validation Form

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

4(c). Review the evidence that supports the project's claim that the project activities were the cause of the attainment of the objective(s).

When control group(s) or norms are used for purposes of comparison, the data should convincingly demonstrate that the differences reported are attributable to project intervention, not to normal growth or achievement.

Validation of Evidence:

Norms were used as a basis of comparison as well as previous patterns of achievement.

This discussion will be divided into each academic area assessed.

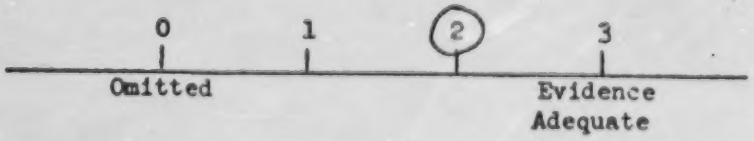
Reading -- The students' scores on the Wide Range Achievement Reading Test showed significant improvement from before to after the program ($t=3.34, df=11, p<.05$). Scores on the Gilmore Reading Test showed similar improvement before to after the program ($t=3.3, df=11, p<.05$). The S.T.E.P. students improved their reading skills to a significant degree during the year they participated in S.T.E.P.

Such differences in test scores cannot be attributed solely to normal growth or achievement, as demonstrated by the next set of scores. The Stanford Achievement tests were administered in October and May to all the seventh and eighth grade students as part of the regular school testing program. Whereas an almost 7 month gain would be expected for the normal student, there was an average +14.3 month gain for the learning disabled S.T.E.P. students on word meaning.

Spelling -- The students' scores on the Wide Range Achievement Test for Spelling showed significant improvement ($t=3.0, df=14, p<.05$). Such differences in tests scores before and after participation in S.T.E.P. are due to more than normal academic development as suggested by the Stanford Spelling Test scores which showed an average gain of 9.1 months in a less than 7 month period. It is important to realize that the expected academic growth rate is the estimate for "normal" students. The expected growth rate for the S.T.E.P. student would be much less.

Math -- Scores on the math section of the Wide Range Achievement Test, although showing improvement, was not statistically significant. On the other hand in a less than 7 month test-retest period, mean differences on the Stanford Test for mathematic application showed average gains of 10.6 months.

Rating of Evidence:



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

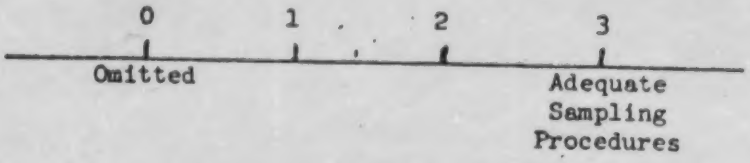
4(d). Review the sampling technique used for each objective. Verify the reported sample size, selection techniques, margin of error, and confidence limits and determine its appropriateness.

If sampling was not used, write NA (not applicable) in the space marked 4(d) on the Effectiveness/Success Summary Sheet.

Validation of Evidence:

It was impossible to have a control group or matched group both for educational and research reasons.

Rating of Evidence: No Rating.



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

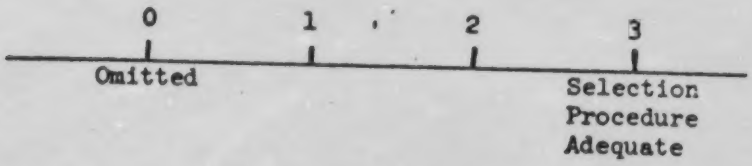
4(e). Review the procedures used to select control groups. Verify that the procedures used do not violate the underlying assumptions of a "control group."

Where procedures are "not applicable," write NA in the space marked 4(e) on the Effectiveness/Success Summary Sheet.

Validation of Evidence:

NOT APPLICABLE

Rating of Evidence: No Rating.



PART II--Validation of Evidence on Effectiveness/Success (cont.)

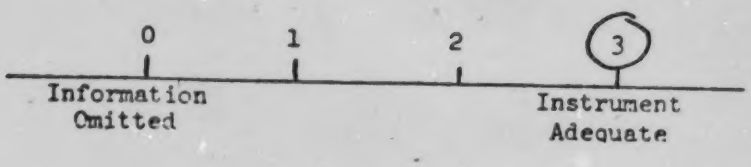
Objective No. 2

4(f). Examine and verify the instrument's validity, reliability, and sensitivity to measure the range, scope, and nature of the behavior measured and determine the adequacy of the instrument used.

Validation of Evidence:

The Wide Range Achievement Test, theGilmore Reading Test and the Stanford Achievement Tests have established validity and reliability.

Rating of Evidence:



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

4(g). Persons responsible for data collection should be qualified for their tasks. Review, by objective, the tasks performed in the data collection process and those competencies (either stated or implied) required to perform those tasks.

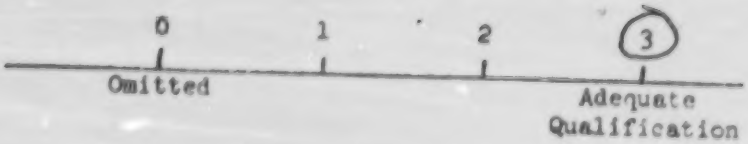
If there was no evidence, ask for this information. Identify instruments administered by persons not qualified.

Validation of Evidence:

The administration of the Gilmore and WRAT Tests were conducted by Miss Terry Pica. Miss Pica has a Master's degree in special educational instruction and specializes in speech therapy. She also had been given additional training by Mrs. Rosalie Saul, program director, and Dr. Regina Turk, school pyschologist for the Easton and Redding Schools.

The Stanford Achievements Tests were administered as part of the regular school testing program under the supervision of the Pupil Services Department of Redding Schools.

Rating of Evidence:



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

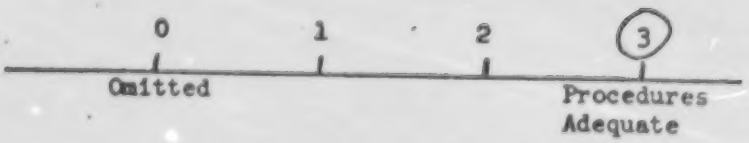
4(h). Review data verification procedures used for assuring the accuracy of data for each objective. The description should include the nature of and degree to which data verification procedures were used to detect and correct errors in data management.

Validation of Evidence:

The WRAT and Gilmore tests were scored by Miss Pica. The scoring was verified by Mrs. Saul.

The S.A.T.'s were computer scored.

Rating of Evidence:



On-Site Validation Form

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

4(i). For each objective, there should be one or more appropriate data analysis procedure(s) to determine the extent to which objectives were attained.

Review the data analysis procedure(s) for the objective. Identify any objective for which there was no provision for analysis of data or for which the analysis procedure was inappropriate. Explain the inappropriateness. Invalidate all conclusions based on such analysis. If conclusions are invalidated and that objective eliminated from validation, a meeting of the entire validation team should be called to determine whether further validation of the project or practice is warranted.

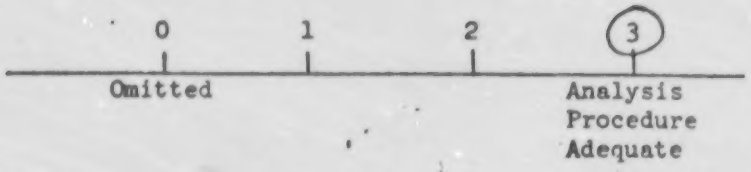
Validation of Evidence:

For the WRAT and Gilmore, the same subjects were measured before and after the program. Therefore, the two samples were correlated and the measurings repeated. The t-test of significance for differences between correlated means was the statistical treatment of choice.

Dr. Ronald Raymond, who was consulting research psychologist at the time, was responsible for the data analysis. He is a staff member of Silver Hills Psychiatric Hospital and a clinical psychologist.

Mrs. Rosalie Saul tabulated the average monthly gains for the S.A.T. scores and offered the comparisons between actual and expected growth rates.

Rating of Evidence:



On-Site Validation Form

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

5. The evaluation findings reported for each objective in the Application for Validation should give acceptable quantitative evidence that the learner performance attainment was met as expected. Verify that the attainment level for each objective was reached and cite the appropriate evidence.

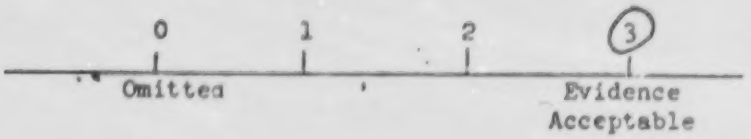
   Objectives failing the criterion must be eliminated from further consideration. If the objective is eliminated, a meeting of the entire validation team should be called to determine if the objective was crucial to the significance of the project or practice under validation. Upon such determination, the entire project or practice should be rejected from further validation.

Validation of Evidence:

Reading - On the Gilmore Reading Test, students' performance indicated a significant improvement in reading accuracy before and after participation in S.T.E.P. ($t=3.3, df=12, p<.05$). On the reading section of the Wide Range Achievement Test there was also a significant improvement before and after the program ($t=3.34, df=11, p<.05$). These changes in the learners can be attributed to chance factors less than 5 in 100 times. Additional evidence suggests that improvement in reading ability was beyond the growth patterns or normal students. The average gain on the Stanford Achievement Test for word meaning was +14.3 months even though the test-retest period was only seven months. The expected growth rate of children with learning problems is usually less than those for other children.

Spelling - The S.T.E.P. students showed significant improvement in the spelling section of the WRAT administered before and after participation in the program ($t=3.0, df=14, p<.05$). The score differences cannot be attributed to chance factors alone. The average gain on the Stanford Spelling Test was +9.1 months in less than a seven month test-retest period suggesting that the S.T.E.P. learning disabled students' gain was more than expected for normal children during the same time period.

Rating of Evidence:



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

5. (Continued)

Math - The improvement shown on the WRAT for math was not large enough to be attributed to other than chance factors. However, scores on the Stanford Test for mathematical application showed a +10.6 month gain over only a 7 month period. This represents a 3.6 month gain over and above that expected for normal students. The gain would probably be even greater if compared to the expected growth rate for learning disabled children.

On-Site Validation Form

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

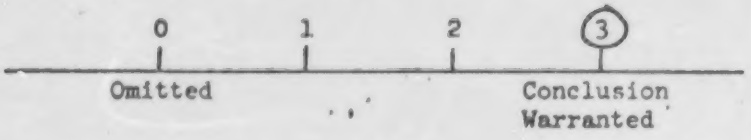
6. The evaluation supports the conclusion that the associated learner change implicit in the attainment of the objective was directly associated with project activities. Examine the conclusions drawn from the evaluation evidence for the objective for the purposes of verifying that the evidence supports the probability that learner change was associated with project activities; examine the conclusions to determine the generalizability of the findings.

   Objectives failing the criterion must be eliminated from further consideration.

Validation of Evidence:

The S.T.E.P. students' academic performance in areas of reading, spelling and math showed statistically significant improvement while they participated in S.T.E.P. In some specific areas tested, their gains were well beyond the academic development expected of normal students for the same period. These findings are more remarkable when one considers that S.T.E.P. students are referred to the program because they are experiencing difficulty learning in the regular classroom.

Rating of Evidence:



On-Site Validation Form

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 2

7. Review and verify the evidence supporting the conclusions that the findings for each objective are (a) statistically and (b) educationally significant.

Validation of Evidence:

The statistical significance of the reported findings have been discussed in earlier items. The educational significance is quite obvious. The S.T.E.P. student was referred to the program because of he "failed" in the regular classroom situation. His learning disabilities and concomitant social-emotional problems made adjustment to the regular classroom difficult. The evidence strongly suggests that the unique features of the S.T.E.P. program provides an atmosphere conducive to learning for this type of student. Employing Senior Citizens as tutors in a school has many inherent advantages for this neglected segment of the population. In a sense, both the learning disabled child and the senior citizen have been rejected by society. Working together, they seem to provide a mutually beneficial relationship. Anecdotal data, described elsewhere, demonstrates the benefits of involvement in S.T.E.P. for the Senior Citizen.

Rating of Evidence:

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Project objective(s) identified for validation have been attained and the performance of the learners has been improved.

Objective No. 3

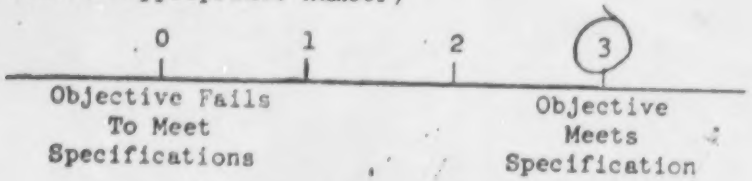
1. Review the structure of the objectives presented in Application for Validation, Part II. Determine if the objective contains the necessary specifications to render it measurable at a given point in time. The specification must include: (1) who is able to do what, (2) at what level of performance, and (3) under what conditions. Any objective not meeting the necessary specifications of measurability must be eliminated from further investigation and validation. Include an explanation of the deficiencies. If the objective to be eliminated is crucial to the significance of the project or the practice under validation, a meeting of the entire validation team should be called at this point to determine whether further validation of the project or practice is warranted.

Validation of Evidence:

As a result of being tutored by senior citizens, learning disabled children will show significantly more positive attitudes at home when rated by parents at the beginning and at the end of the year on the dimensions of Maturity, Cooperation, Getting Along Better with Family and Attitude Toward School.

Secondly, as a result of being tutored by senior citizens, 50% more of the learning disabled will show a more positive attitude toward school than they did at the beginning of the year.

Rating of Evidence:
(Circle appropriate number)



On-Site Validation Form

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

2. Examine and verify the needs assessment procedures and findings for the nominated objective and determine the adequacy of the evidence of need to justify the selection of the objective.

Validation of Evidence:

Review of cumulative folders, referrals and interviews with students, parents, specialists and teachers all present adequate evidence of the need.

Rating of Evidence:

PART II--Validation of Evidence on Effectiveness/Success (cont.)

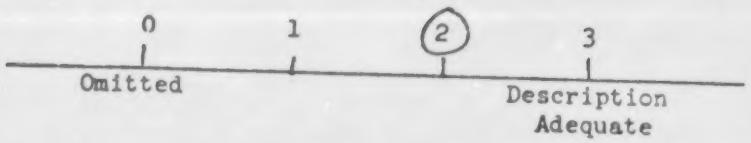
Objective No. 3

3. Examine and verify the activities (methods, strategies, program intervention, etc.) employed to accomplish the objective. Verify the intensity of each method in terms of full-time equivalent professional and nonprofessional personnel required, hours of instruction, etc.

Validation of Evidence:

In the course of the tutorial relationship the Senior Citizen, rather than rejecting the child for his socially unacceptable behavior, helped the student to understand what behavior is and is not acceptable in specific situations and pointed out the consequences of such behavior. The Senior Citizens also attempted to provide a positive, accepting atmosphere for the child. The tutors reinforced the students' strengths and developed their sense of self-worth.

Rating of Evidence:



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

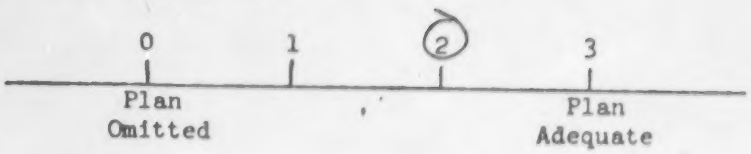
4(a). Each objective must have an evaluation design which will provide the information necessary to determine if the learner change occurred at the levels specified in the objective.

Review the evaluation design for each objective for the purpose of determining that implementation of the design yielded information for rendering conclusions about the attainment of the objective. (In the absence of such a design, the validator should eliminate the objective from further investigation and discuss the discrepancies encountered in the evaluation design.) If the objective to be eliminated is crucial to the significance of the project or practice under validation, a meeting of the entire validation team should be called at this point to determine whether further validation of the project or practice is warranted.

Validation of Evidence:

A pre-test - post-test design was utilized.

Rating of Evidence:



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

4(b). Review the evaluation procedures for each objective. The description of the procedures should include who did what to whom, how, when, and under what conditions to collect evaluative data.

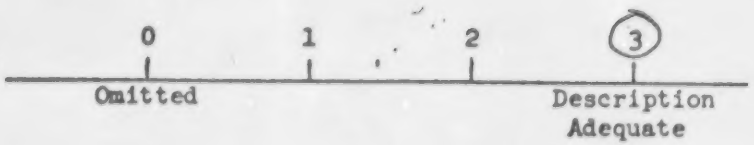
Validation of Evidence:

Home Behavior - S.T.E.P. parents rated their children on a 1 to 5 scale indicating how the children's behavior was viewed last year (before S.T.E.P.) and this year (after S.T.E.P.). The following characteristics were rated: (1) maturity, (2) cooperation at home, (3) gets along better with family, (4) attitude toward school. Miss Pica and Mrs. Saul carefully explained the questionnaire to each parent and were available to answer any questions as the parent made the ratings.

School Attitude - After participation in the program, S.T.E.P. students rated the degree which they liked certain school related activities on a 0 - 4 scale from least to most liked. The attitude scale was administered in small groups and was closely supervised by Miss Pica. The following items were analyzed as indicators of attitude change toward school:

1. Liked school
2. Liked to ride the bus
3. Liked doing homework
4. Liked the report card he or she received

Rating of Evidence:



On-Site Validation Form

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

4(c). Review the evidence that supports the project's claim that the project activities were the cause of the attainment of the objective(s).

When control group(s) or norms are used for purposes of comparison, the data should convincingly demonstrate that the differences reported are attributable to project intervention, not to normal growth or achievement.

Validation of Evidence:

Home Behavior - The following percentage of gain was calculated from the ratings of home behavior by the parents of the children before and after involvement in S.T.E.P. The results of statistical analysis is also reported.

1. Maturity - 37.3% (Before S.T.E.P. mean rating =3, after S.T.E.P. mean rating =4.1; $t=4.64, df=16, p < .01$).

2. Cooperation - 33.3% (Before S.T.E.P. mean rating =3, after S.T.E.P. mean rating =4; $t=4.8, df=16, p < .01$).

3. Gets along better with family - 26.1% (Before S.T.E.P. mean rating = 2.9, after S.T.E.P. mean rating = 3.6; $t=2.95, df=16, p < .01$).

4. Attitude toward school - 21.6% (Before S.T.E.P. mean rating = 3.2, after S.T.E.P. mean rating = 3.9; $t=2.8, df=16, p < .02$).

School Attitude - The following percentage of gain was indicated by the S.T.E.P. students.

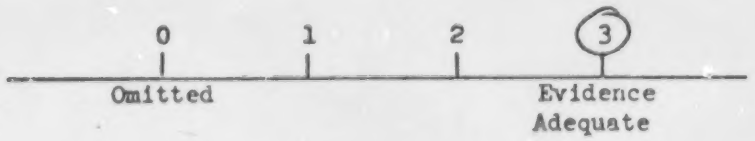
1. Attitude toward school

59% like school more this year than last
27% like school the same
4 % like school less

2. Attitude toward bus riding

50% liked to ride the bus more this year
45% liked to ride the bus the same
5% liked to ride the bus less

Rating of Evidence:



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

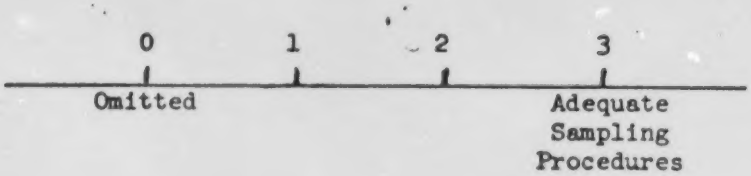
4(d). Review the sampling technique used for each objective. Verify the reported sample size, selection techniques, margin of error, and confidence limits and determine its appropriateness.

If sampling was not used, write NA (not applicable) in the space marked 4(d) on the Effectiveness/Success Summary Sheet.

Validation of Evidence:

NOT APPLICABLE

Rating of Evidence: No rating.



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

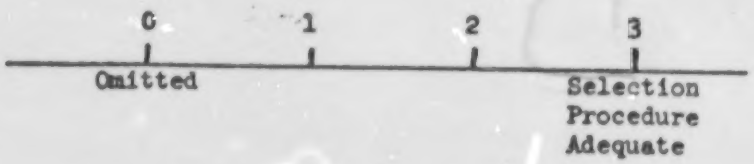
4(c). Review the procedures used to select control groups. Verify that the procedures used do not violate the underlying assumptions of a "control group."

Where procedures are "not applicable," write NA in the space marked 4(e) on the Effectiveness/Success Summary Sheet.

Validation of Evidence:

NOT APPLICABLE

Rating of Evidence: No rating.



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

4(f). Examine and verify the instrument's validity, reliability, and sensitivity to measure the range, scope, and nature of the behavior measured and determine the adequacy of the instrument used:

Validation of Evidence:

Both the home rating and attitude scales were locally developed for the purposes of the study.

The Home Rating Scale of Socially Acceptable Behavior was a 5 point rating scale for each of four traits -- maturity, cooperation at home, gets along better in family, and attitude toward school. The parents rated their children on each trait as they viewed them last year and this year.

The Attitude Toward School Scale was a 5 point self-rating scale tapping attitude toward four school related items -- school itself, bus ride, homework and report card. The S.T.E.P. student rated these items as he felt about them last year and this year.

Rating of Evidence:

PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

4(g). Persons responsible for data collection should be qualified for their tasks. Review, by objective, the tasks performed in the data collection process and those competencies (either stated or implied) required to perform those tasks.

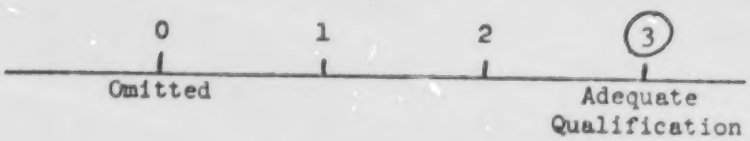
If there was no evidence, ask for this information. Identify instruments administered by persons not qualified.

Validation of Evidence:

Home Behavior - Parents were supervised in their data collecting by the S.T.E.P. professional staff who were available to answer questions to clarify behaviorial criteria of the stated characteristics.

School Attitude - Miss Pica administered the test in small groups and was available for questions.

Rating of Evidence:



PART II--Validation of Evidence on Effectiveness/Success (cont.)

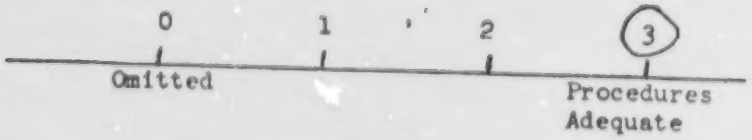
Objective No. 3

4(h). Review data verification procedures used for assuring the accuracy of data for each objective. The description should include the nature of and degree to which data verification procedures were used to detect and correct errors in data management.

Validation of Evidence:

Data were checked for accuracy by project staff and consultant.

Rating of Evidence:



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

4(i). For each objective, there should be one or more appropriate data analysis procedure(s) to determine the extent to which objectives were attained.

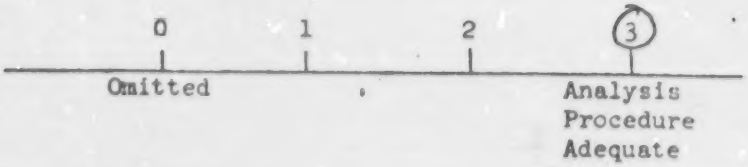
Review the data analysis procedure(s) for the objective. Identify any objective for which there was no provision for analysis of data or for which the analysis procedure was inappropriate. Explain the inappropriateness. Invalidate all conclusions based on such analysis. If conclusions are invalidated and that objective eliminated from validation, a meeting of the entire validation team should be called to determine whether further validation of the project or practice is warranted.

Validation of Evidence:

Home Behavior - Since a before program - after program comparison was made in the same subjects, a t-statistic to measure significance of differences between correlated means was used. An analysis of overall mean differences across all four characteristics as well as an analysis of mean differences for each characteristic was performed by Robert E. Matefy, research consultant.

School Attitude - Percentages of positive, same and negative changes were calculated by Mrs. Rosalie Sarl.

Rating of Evidence:



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

5. The evaluation findings reported for each objective in the Application for Validation should give acceptable quantitative evidence that the learner performance attainment was met as expected. Verify that the attainment level for each objective was reached and cite the appropriate evidence.

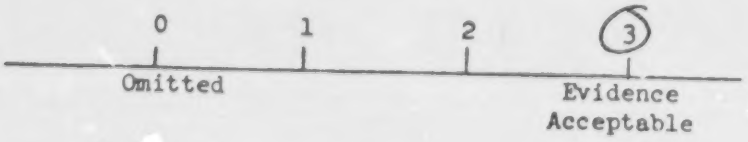
Objectives failing the criterion must be eliminated from further consideration. If the objective is eliminated, a meeting of the entire validation team should be called to determine if the objective was crucial to the significance of the project or practice under validation. Upon such determination, the entire project or practice should be rejected from further validation.

Validation of Evidence:

Home Rating of Socially Acceptable Behavior - According to ratings by parents, the S.T.E.P students improved significantly on all four traits tapping socially acceptable behaviors. This improvement occurred during the time the student participated in S.T.E.P. The overall mean rating for all 4 traits before S.T.E.P. =12.1. After S.T.E.P., the overall mean rating =15.7. The statistical results ($t=5.5, df=16, p<.01$) indicated that these differences could be due to chance less than 1 in 100 times. The mean differences of each trait (Maturity, Cooperation, Getting Along with the Family, Attitude Toward School) also indicate that chance factors are unlikely. There are less than 1 in 100 and 2 in 100 probabilities that the differences in ratings between before S.T.E.P. and after S.T.E.P. are due to chance factors (see item 4(c) for statistical summaries).

School Attitude - As indicated in 4(c), S.T.E.P. students reported a gain in favorable attitudes toward such school related items as school itself, bus riding, homework and their report cards. In terms of percentages, from 38% to 59% of the students showed gains in their school related attitudes since their involvement in S.T.E.P. This compares with from 4% to 12% who indicated less favorable attitudes since their S.T.E.P. involvement. More students held positive self-proclaimed attitudes toward school after S.T.E.P. than before S.T.E.P.

Rating of Evidence:



PART II--Validation of Evidence on Effectiveness/Success (cont.)

Objective No. 3

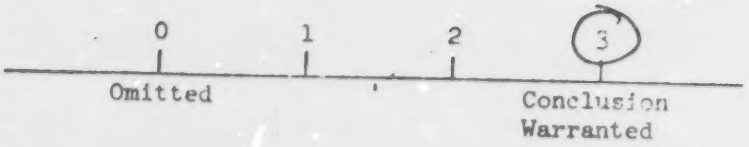
6. The evaluation supports the conclusion that the associated learner change implicit in the attainment of the objective was directly associated with project activities. Examine the conclusions drawn from the evaluation evidence for the objective for the purposes of verifying that the evidence supports the probability that learner change was associated with project activities; examine the conclusions to determine the generalizability of the findings.

   Objectives failing the criterion must be eliminated from further consideration.

Validation of Evidence:

Review of final evaluation report of the project.

Rating of Evidence:



PART II--Validation of Evidence on Effectiveness/Success (cont.)

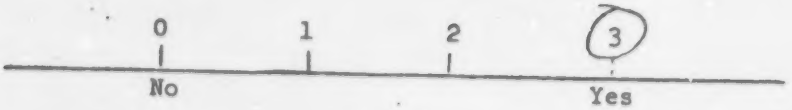
Objective No. 3

7. Review and verify the evidence supporting the conclusions that the findings for each objective are (a) statistically and (b) educationally significant.

Validation of Evidence:

The evidence from all project documents was reviewed and the conclusions were statistically and educationally significant.

Rating of Evidence:



PART II--Validation of Evidence on Effectiveness/Success

SUMMARY RATING

Evidence of Effectiveness/Success Items	Rating Points Nominated Objectives by Number 1	2	3	4	5	6	7
*1. Measurability of objectivity	3	3	3				
2. Needs determination	3	3	3				
3. Intensity of project activities	3	3	2				
4. Evaluation (See directions below.)	3	2.6	2.3				
*5. Attainment of objective	3	3	3				
*6. Achievement and learner change and generalizability of project	3	3	3				
*7. Statistical and educational significance	3	3	3				
SUMMED RATING POINTS (Summed Rating Points Must Total 19 for Validation of Each Objective.)							
Total Scaled Score(Summed Score Divided by 7) Transfer Scaled Score to p. 104.	21	20.6	19.3				

Add additional objectives as needed.

*Items 1, 5, 6, and 7 must each receive a rating of 3 points. If any of these items does not receive a rating of 3 points, reject the objective from further validation.

Directions for Item 4 (Evaluation, parts a-i): Enter rating for each item. For each objective, total the rating (parts a-i). Divide the total by 9 (the number of subitems).
If item 4(d) or 4(e) is rated NA (not applicable), divide the total by 8.
If item 4(d) and 4(e) are rated NA (not applicable), divide the total by 7.
Enter result under item 4 in summary record above.

4. Evaluation

	Rating Points Nominated Objectives by Number 1	2	3	4	5	6	7
(a). Evaluation design	3	3	2				
(b). Evaluation procedures	3	3	3				
(c). Project activities	3	2	3				
(d). Sampling techniques	NA	NA	NA				
(e). Control group selection	NA	NA	NA				
(f). Instrumentation	3	3	2				
(g). Qualified personnel	3	3	3				
(h). Data accuracy	3	3	3				
(i). Data analysis procedures	3	3	3				
TOTAL	21	20	19				

On-Site Validation Form

PART III--Validation of Evidence on Cost Information

> Cost Information: Information on start-up and operational costs which, when combined with Part II, Effectiveness/Success, and Part IV, Exportability, will help an interested school district make a decision about adoption/adaption of the project practice.

DIRECTIONS FOR RATING

On-site validation of cost is based on the evidence reported in the Application for Validation, Part III, Cost Information, and the accompanying supporting documents.

Rating by Validation Item

1. Examine and verify the evidence provided for each item by the project personnel.

2. Circle the appropriate number. Assign a point value of "0" to any item for which no observable evidence is presented.

   Assign a point value of "1" to any item for which the project staff presents observable evidence that is persuasive in support of the item intent.

   Assign a point value of "2" for any item for which the project staff presents observable evidence of a substantial and persuasive, but not conclusive, nature for the item.

   Assign a point value of "3" for any item for which the project staff presents observable evidence which is both conclusive and compelling that the intent of the item was wholly fulfilled.

3. Record the rating value for each item on the Validation Summary Record (on page 88) in the item cell keyed to the number of the item.

On-Site Validation Form

PART III--Validation of Evidence on Cost Information (cont.)

1. Examine and verify the total expenditure for the last completed grant period and the estimated cost of adopting/adapting this program by another school district.

Validation of Evidence:

A review of the L.E.A.'s application for validation pages 31 and 38 of Part I presents concise, accurate fiscal data to verify the total expenditure for the last completed grant period. This fiscal data can be adopted or adapted by another school district.

Rating of Evidence:
(Circle the appropriate number)

On-Site Validation Form

PART III--Validation of Evidence on Cost Information (cont.)

2. Examine and verify the evidence on per-learner cost and the method used to determine cost.

Validation of Evidence:

Fiscal data presented on page 30, Part III accurately identifies the procedure through which a per-learner cost has been arrived at. The total operational cost of $22,000 divided by the total pupil population of 22 yields a per pupil cost of $1,000.00. To derive a monthly cost this figure is further divided by 10 which yields a monthly cost or $100.00 This data has been verified and the procedure is sound.

Rating of Evidence:

PART III--Validation of Evidence on Cost Information (cont.)

3. Examine and verify the evidence related to the determination of the average number of hours per learner served for the last grant period.

Validation of Evidence:

The validator investigated the data presented on page 40, Part III which indicated 211 average total of hours per learner served. An inspection of tutor payrolls and project attendance verified that 211 was the average total number of hours per learner served.

Rating of Evidence:

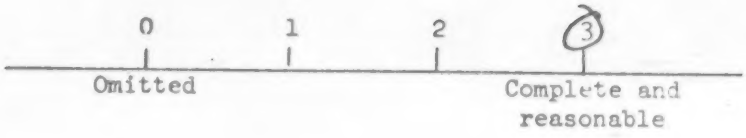
PART III--Validation of Evidence on Cost Information (cont.)

4. Examine and verify the evidence related to the estimated start-up costs for replication of the project and the method used to determine the costs.

Validation of Evidence:

The information presented on pages 41 and 42 of Part III clearly presents the fiscal data regarding start-up costs. The line items including staff development, materials, facilities, contracted services, equipment and travel, represent standard budgetary practice. An investigation of the project budget verifies the above.

Rating of Evidence:



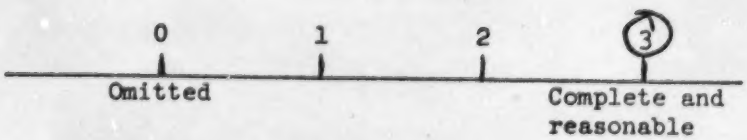
PART III--Validation of Evidence on Cost Information (cont.)

5. Examine and verify the evidence related to the estimated per-learner start-up costs for the purpose of replication in a similar environment.

Validation of Evidence:

The procedure followed by the L. E. A. in projecting an estimated per-learner start-up cost presented on page 43 is a valid procedure. The projected per pupil start-up cost of $90.00 has been arrived at by dividing the total numbers of learners into the total estimated start-up cost. However the project's explanation did not include the fact that the yearly per pupil start-up cost is actually $900. The $90.00 per pupil cost represents a monthly figure.

Rating of Evidence:



On-Site Validation Form

PART III--Validation of Evidence on Cost Information

SUMMARY RATING

Evidence of Cost Items		Rating Points
1.	Cost information for last completed grant period	3
2.	Per-learner cost information	3
3.	Information on average number of hours per learner	3
4.	Information on start-up costs for replication	3
5.	Information on per-learner start-up costs	3
SUMMED RATING POINTS (Summed Rating Points Must Total 15 for Validation)		15
Total Scaled Score (Summed Score Divided by 5)		3

Transfer Scaled Score to p. 104.

PART IV--Validation of Evidence of Exportability

DIRECTIONS FOR RATING

1. Examine and verify the evidence provided for each item reported in the Application for Validation, Part IV, Exportability.

2. Report in the space provided HOW you validated the evidence presented and the FINDINGS of the validation. DO NOT repeat the evidence presented by the project unless new evidence, not reported in the Application for Validation, is used.

3. Circle the appropriate number. Assign a point value of "0" to any item for which no observable evidence is presented.

   Assign a point value of "1" to any item for which the project staff presents observable evidence that is persuasive in support of the item intent.

   Assign a point value of "2" for any item for which the project staff presents observable evidence of a substantial and persuasive, but not conclusive, nature for the item.

   Assign a point value of "3" for any item for which the project staff presents observable evidence which is both conclusive and compelling that the intent of the item was wholly fulfilled.

4. Record the rating value for each item on the Validation Summary Record (on page 103) in the item cell keyed to the number of the item.

PART IV--Validation of Evidence on Exportability (cont.)

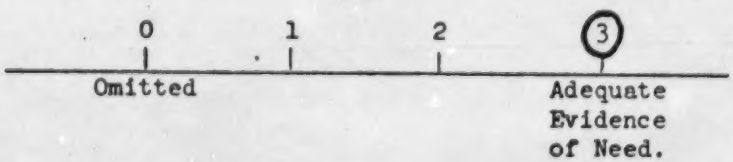
A validated practice is exportable if (1) it is feasible to communicate to other school districts and (2) it can be adopted or adapted by other school districts with similar needs and environments. Used interchangeably with Portable, Replicable, and Communicability.

1. Examine and verify the description and documentation of the local educational need for this project.

Validation of Evidence:

In 1972-73 at the John Read Middle School one resource teacher was responsible for servicing all of the handicapped children in grades 5 through 8 with the exception of one self-contained class of twelve 4th, 5th and 6th graders. Only eight of these were John Read pupils; the rest were 4th graders bused from the Redding School. Research evidences that at least 10% of any school population has learning problems. This means that a minimum of 62 children at John Read Middle School were entitled to help. Because it was impossible for one resource teacher to handle the remaining 54 pupils, only the most needy were chosen for help. Therefore, a proposal to service the balance of the population at an economical cost was accepted as a need in the district. This project addressed itself to 7th and 8th graders as this segment of a school is considered the most difficult to remediate.*

*Special education meetings held throughout the state in 1972-1973.



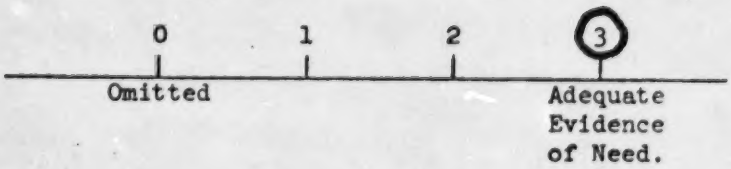
PART IV --Validation of Evidence on Exportability (cont.)

2. Examine and verify the evidence that the project will be continued with State or local funds after the termination of Federal funds.

Validation of Evidence:

The board in its meeting stated that the school district will continue the program after federal funding terminates.

Rating of Evidence:



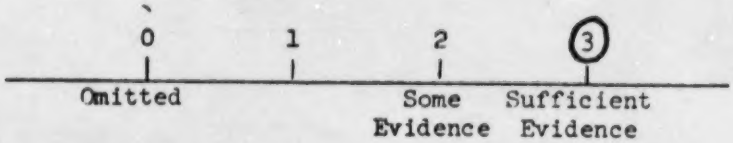
PART IV--Validation of Evidence of Exportability (cont.)

3. Examine and verify the evidence that the Board of Education will operate the project as a demonstration site, assuming funds are made available for demonstration purposes.

Validation of Evidence:

If the project is validated, the Board of Education will be willing to operate in the context reported, provided that no greater level of local financial support is required, since this is totally impossible at this time.

Rating of Evidence:



PART IV --Validation of Evidence on Exportability (cont.)

4. Examine and verify the accuracy of the described target population of the project.

Validation of Evidence:

This project has three components:

a. Handicapped 7th and 8th grade students

b. Unemployed senior citizens

c. A program coordinator who can be trained to prescribe for the handicapped, communicate and train senior citizens, as well as interact with parents and teachers.

The handicapping conditions of the children would be by definition under Public Act. No. 627. Tutors would have to be screened and trained and after working with children for a few weeks, if found to be ineffective, would be removed from the program.

Rating of Evidence:

PART IV--Validation of Evidence of Exportability (cont.)

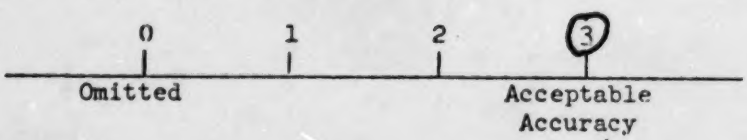
5. Examine and verify the accuracy of the descriptions of institutional variables critical to the success of the project, i.e., school administration, teaching staff, physical facilities.

Validation of Evidence:

Almost any school in Connecticut would be appropriate for this program if the building administrator is supportive of the project and the building has an appropriate space to house from six to eight children and five to six tutors a period. Using Senior Citizens as aides rather than parents as aides is appealing to teachers. The elderly due to their age are not likely to replace the professional nor are they critical of schools and teachers as they lack a vested interest. Seniors seem to elicit support from the staff either because of "respect for age" or "a need to protect".

The learning disability teacher must change her role of "direct teaching" and become a supervisor of the senior citizens and prescriber for the individual pupils. However, having many aides reduces the daily work load of the teacher.

Rating of Evidence:



PART IV--Validation of Evidence of Exportability (cont.)

6. Examine and verify the accuracy of the descriptions of any community and home variables, e.g., the necessity for parental and community involvement.

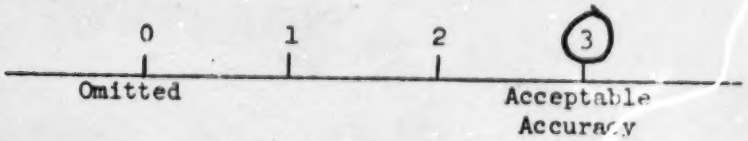
Validation of Evidence:

Community involvement is organic to the program. For the first time schools are willing to reimburse an almost forgotten segment of each town's society, its elderly. In return for this reimbursement, schools are receiving the benefit of the expertise, the skills and the abilities of these people. Once the senior citizen has been trained to understand the handicapped adolescent, the teenage can become an apprentice to the skilled craftsman. In this non-threatening relationship, many youngsters seem themselves in a new light, a better self-image develops and meaningful learning takes place. In towns where little industry exists, this project brings industry into the schools rather than taking the children to the industry. Money which was formerly spent for transportation may now be used for direct instructional services.

Rather than going out into the community to desseminate information about our schools we are bringing people into the schools who often do not understand either the school's problems or the solutions developed to deal with them. To have the elderly understand the young and the young understand the elderly should encourage reciprocal support.

The involvement of parents is not critical to the success of the project. However, whenever parents understand their children's needs, benefit comes not only to the child but also to the school in the form of parent support. The parents in Redding relate very well to the senior tutors of their children. Perhaps parents, who failed in school themselves feel threatened by a professional, but can talk to a tutor on an informal level with which each is comfortable.

Rating of Evidence:



PART IV--Validation of Evidence of Exportability (cont.)

7. Examine and verify the accuracy of the description of the activities determined by the project staff to be critical to the success of the project.

Validation of Evidence:

The activities critical to the success of the program are:

a. Screening tutors - A good group of tutors was assembled through word of mouth, radio and newspaper publicity, or through advertisements in places of business such as banks, drug and grocery stores. Church groups, local clubs or housing projects, etc. were not the best sources for tutors at all. In fact, psychologist, Dr. Ronald Raymond, noted in reviewing the interview sheets that the one thing that the tutors had in common was that they did not belong to many clubs. It is also important in the screening process that each town find tutors who would be comfortable living in that community. For instance, in a town such as Redding the semi-professional tutor feels comfortable with the children with whom he is working. However, in a town of an industrial nature the tutors should be similar to the parents of the children who live in that community.

b. Training tutor through:

--Group discussions - These discussions relate to the relationship of the tutor and the tutee, the teaching←→learning situations, causes of disabilities, emotional factors, sensory motor techniques for training, role of creativity, task breaking and so forth.
--Lectures - These were held on methods for teaching in academic areas. The stress was placed on the game manufacturing aspects of helping the adolescents to be teachers of younger children. It is important to bring in outside people for the lectures and the discussion group as the tutors need to be exposed to the various fields of discipline.

Rating of Evidence:

PART IV--Validation of Evidence of Exportability (cont.)

7. (Continued)

--Role-playing - In the role-playing situation the tutors took turns as child and teacher. Interesting findings evolved such as-we all learned from different modalities, frustrations of teaching and learning.
--Reading - Reading materials were recommended by the director, speakers, and tutors to each other.

The Redding Model can serve as a training center for visitations, observations and discussions by the new would-be tutors from other communities. Project S.T.E.P. will also develop a manual to include training techniques for Seniors, pairing tutors and tutees, helping tutors to relate to school staffs and school procedures.

c. Developing prescriptions for the children - The usual prescription developed by the learning disability teacher deals with the child's weaknesses such as "visual sequencing," "auditory memory," "eye-hand coordination," etc. Rather than having such specific prescriptions, the learning disability teacher must be creative enough to write her prescription in the form of an order for creating a game. It might be,"we have a child in the third grade who cannot think of the order in which pictures should come; so let's develop a game that has five pictures. For instance the pictures might be of:

1. icing a cake
2. mixing the batter
3. breaking the eggs
4. putting it in the oven
5. putting it in the pan.

Once the child decides that these are the five pictures and that they are to be properly arranged, he soon develops a sense of sequencing for himself although he is preparing the task for another child."

screening students: see item 13 Part IV

On-Site Validation Form

PART IV--Validation of Evidence of Exportability (cont.)

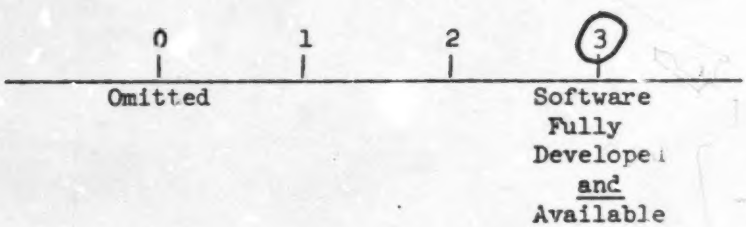
8. Examine and verify that the essential materials (software) are fully developed and publicly available for potential adoptors.

Validation of Evidence:

Materials - The materials required for the program would be the sort of materials used by an art teacher or an industrial arts teacher; paper, oak tag, magic markers, paints, tacks, wood, nails, etc.

Audio-visual equipment for producing tapes, slides and other learning materials encourages creativity in the student and his tutor.

Rating of Evidence:



PART IV--Validation of Evidence of Exportability (cont.)

9. Examine and verify the descriptions of the types, numbers and special qualifications of personnel required for the project.

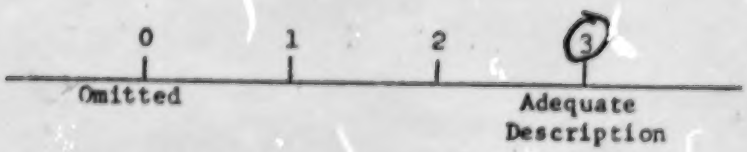
Validation of Evidence:

Personnel - The program coordinator is probably the most essential element in the program in any town. He or she should have experience in working with teachers, para-professionals and other personnel. It would be expected that he or she would have had extensive experience in working with handicapped children as well as the ability to diagnose and remediate academic problems. The person should have some background in tests and measurements and psychology. Another important aspect of the position would be the ability to create materials for learning. A penchant for good public relations would also be helpful. This person should also be able to help train and supervise the elderly as tutors.

In addition to the program coordinator, the number of Senior Citizens who would be hired and trained would be related to the number of children and the severity of their problems. It is probably easier to work in man hours per child rather than numbers of tutors. It will also be found that few of the tutors are willing to work five days a week. Therefore, a three day tutor would need a two day tutor as his counterpart. One cannot ascertain this until the children are identified and the tutors screened.

See also pp 15-16 Part I of Application for Validation

Rating of Evidence:



PART IV--Validation of Evidence of Exportability (cont.)

10. Examine and verify the descriptions of the procedures and materials necessary for personnel training.

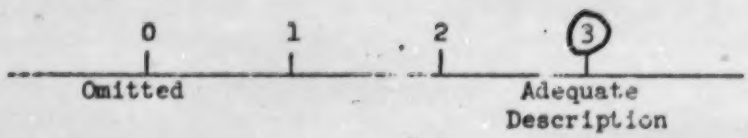
Validation of Evidence:

Procedures and Materials Necessary for Personnel Training

It will be necessary to hold workshops for the training of the professionals from the adopting school. This investigator envisions one workshop a week for eighteen weeks at which time professionals such as, psychologists, social workers and other educators, skilled in developing homemade materials, will supervise the meetings. Together the participants and the director will develop a manual which will serve the towns as training manuals for the Senior Citizen. During the same period the adopting schools will be seeking Senior Citizens for their programs. The participants will also be encouraged to observe at the producer site and become involved with the students and tutors there. The director of the project will also be available to make visits to the adopting towns to help them screen their Seniors and potential pupils who might be included in the program.

The materials necessary for the workshops would be tape recorders, video equipment, art and industrial arts supplies, which are used for developing learning materials.

Rating of Evidence:



PART IV--Validation of Evidence of Exportability (cont.)

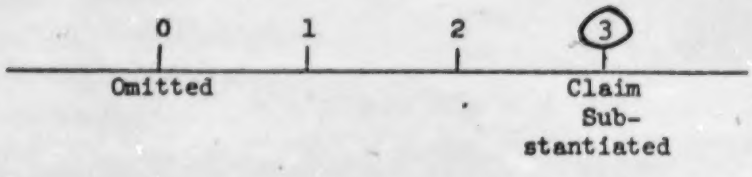
11. Examine and verify the claim that the project can be adopted in whole or in part.

Validate Evidence:

Feasibility of Adopting the Entire Project or Components of the Project

Although it might be possible to adopt part of the S.T.E.P. project, it would not be as effective as adopting the entire project. Conceivably senior citizens could be used in roles different from those in Redding School, but the training the producer has to offer is most useful for senior citizens who are to work with handicapped adolescents. Because of the benefits to the older handicapped learner, one might at last have the teacher of children with learning disabilities supervise the children's creation of games in the same way as the senior tutor would. Adopting the entire package, however, has the advantages of being economical, practical and effective while also providing a means for integrating the elderly into the community in a meaningful way.

Rating of Evidence:



PART IV--Validation of Evidence of Exportability (cont.)

12. Examine and verify the adequacy of the description of the special equipment (hardware) and/or unique facilities required for the project.

Validation of Evidence:

Listed below are the materials necessary for the project.

1. Rental of a typewriter -- since much paper work has to be accomplished and the Redding School is unable to provide one.

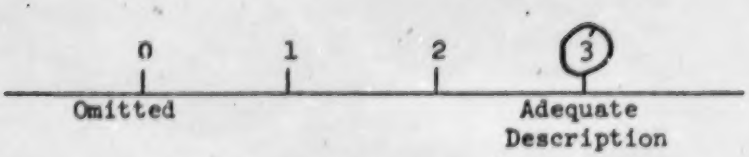
2. Two tape recorders and rental of a video tape recorder with an operator.

Other than the above described equipment no hardware should be necessary. The Redding School has two rooms available for the training sessions and the workshops.

3. Portable TV camera.

4. Two cameras

Rating of Evidence:



PART IV--Validation of Evidence of Exportability (cont.)

13. Examine and verify the accuracy of the descriptions of the problems and solutions in implementation of the project.

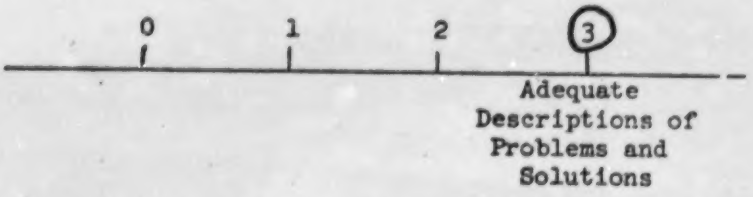
Validation of Evidence:

Recruiting Senior Citizens became more difficult than anticipated. It seemed appropriate to contact church groups, housing projects, American Association of Retired People and other organizations. None of these sources produced the effective tutors. A good group of tutors was finally assembled through word of mouth, a few from radio and newspaper publicity but the majority applied in response to large posters placed in banks, grocery stores and drug stores. Drug stores proved to be the most fruitful.

Training for the Seniors was to take place during the summer but because of late funding and the difficulty in obtaining tutors the program could not really begin until November. At this point the children and teachers were completely scheduled and the schools were wary of allowing children to leave regularly scheduled classes to participate in Project S.T.E.P. Administrators also had doubts about the Seniors' ability to cope with the severely disabled. Therefore, S.T.E.P. started late with a clientele of handicapped learners or mildly disturbed children. As the Seniors proved their worth, the most difficult children were slowly added to the program. Some of the early confusion spoiled the testing schedule and the project could not be carried out as systematically as planned.

This project planned to receive funds through Retired Senior Volunteer Program, a Department of the Aging, which did not provide the funds as promised. However, later in the year we did receive funds from the Department of Labor. Schools should be aware that they can probably receive additional funds from either the Department of Aging or the Department of Labor. However, they should not count on these funds until they have a firm commitment.

Rating of Evidence:



PART IV--Validation of Evidence of Exportability (cont.)

SUMMARY RATING

Evidence of Exportability Items	Rating Points
* 1. Description of Learner Needs	3
* 2. Continuation of Project with State or Local Funds	3
* 3. Willingness to Serve as a Demonstration Site	3
4. Description of Target Population	3
5. Description of Institutional Variables	3
6. Description of Community and Home Variables	3
7. Description of Project Activities	3
* 8. Availability of Software	3
9. Description of Personnel	3
*10. Training Procedures and Materials	3
11. Adaptability of Projects	3
12. Description of Hardware	3
13. Description of Problems and Solutions	3
SUMMED RATING POINTS (Summed Rating Points Must Total 35 for Validation)	39
Total Scaled Score (Summed Score Divided by 13)	3

Transfer Scaled Score to p. 104.

*Items 1, 2, 3, 8, and 10 must each receive a rating of 3 points. If any one of these items does not receive a rating of 3 points, reject the project from further validation.

VALIDATION SUMMARY

Validation of Evidence on Effectiveness/Success

Obj. 1 21
Obj. 2 20.6
Obj. 3 19.3

Total Scaled Score..... 60.0

Validation of Evidence on Cost

Total Scaled Score 3

Validation of Evidence on Exportability

Total Scaled Score 3

TOTAL 66.0

Section C

Conclusions and recommendations of team members including minority report (attach additional sheets as needed):

Part II--Effectiveness/Success

The project has demonstrated success in training senior citizens to act as tutors of the learning disabled student. The academic achievement of these students as well as their attitudes toward school have improved. Parents also report significant positive behavior changes and attitudes in their children.

There have been other spin-offs from the program that have not directly related to the three objectives validated:

1. The many games developed by the tutor-student have been utilized for instructional use by elementary teachers and students as well.

2. Senior citizens welcome the opportunity to be in a creative, useful role after retirement and the experiences have enhanced their self-concept as well as improved their attitude and appreciation of what is going on at the public schools.

3. The students have surrogate grandparents and have personalized attention in a non-coercive environment. The exposure of working with older people by students has presented them an opportunity to develop more positive attitudes and understanding of the older citizens.

4. The program has been installed without disruption to the regular school program and has increased positive public relations within as well as without the school.

Section C - Continued

Part III--Validation of Evidence on Cost Information

Validation conclusions pertaining to evidence on cost information are:

1. The L.E.A. has followed standard budgetary procedures.
2. Monies were expended in an appropriate fashion.
3. Fiscal reporting utilized by the L.E.A. can easily be adopted or adapted by another interested school district.

Part IV--Exportability

The project can be exported as it is written in the Application for Validation.

Recommendations

Part II--Effectiveness/Success

For a school district adapting or adopting the project, the validator has the following suggestions for evaluating effectiveness.

1. As much as possible information be utilized from the regular school testing program and cumulative folder of the student involved.
2. Unobtrusive measures and archival data be utilized such as:
   a. attendance records both before, during and after the program of regular and targeted students.
   b. behavioral referrals before and after program of both regular and targeted students.
   c. the students' report card and teacher ratings of the targeted students both before, during and after the program should be collected.
   d. continuance or withdrawal from the program and school; drop-out rates before and after the program starts.

Section C - Continued

e. popularity as well as continuance of the tutors in the program, number of hours spent in the program, etc.

3. The comparison of the student's achievement with his expected level of achievement, as well as past pattern of acheivement. Graphs of achievement might help display the results. Also attention should be given to listing the specific objectives accomplished by the student.

4. Previous patterns of achievement within the district can be plotted in a time series design.

5. If personal or social adjustment is a targeted behavior, the many standardized rating forms and tests should be reviewed as to their appropriateness and their validity and reliability.

6. If attitude toward school, self-concept, achievement, motivation are selected as targeted behavior, the many standardized tests should be reviewed first as to their appropriateness and their validity and reliability before homemade scales are constructed.

7. Anonymous ratings by students of the tutors and the program should be secured periodically.

8. Time sample taping as well as interaction analysis of the tutoring sessions could be used to evaluate the performance of the tutors.

9. Local performance objectives should be developed for the inservice program for tutors and used as a basis for evaluation.

Part IV--Exportability

Any adopting or adapting school district should use their own skills to develop training programs rather than using S.T.E.P. personnel. By using local professionals to do this training the tutors will be taught by personnel who are fully familiar with local problems and issues.

Section D

A statement as to the innovativeness of the project as viewed by the Validation Team (attach additional sheets as needed):

Innovativeness

The project has the following innovative features:

1. The use of senior citizens as tutors of the learning disabled student.

2. The use of a games approach rather than a traditional didactic relationship of the tutor with the student.

3. The stress on affective behavior as well as cognitive behavior change on the part of both tutors and students.

Fewer than 5% of the Connecticut schools are attempting any of the components of this program.

SECTION E - 2

PART II--Effectiveness/Success - Dr. Robert Drummond, Chairman

The project has deomonstrated success in training senior citizens to act as tutors of the learning disabled student. The academic achievement of these students as well as their attitudes toward school have improved. Parents also report significant positive behavior changes and attitudes in their children.

There have been other spin-offs from the program that have not directly related to the three objectives validated:

1. The many games developed by the tutor-student have been utilized for instructional use by elementary teachers and students as well.

2. Senior citizens welcome the opportunity to be in a creative, useful role after retirement and the experiences have enhanced their self-concept as well as improved their attitude and appreciation of what is going on at the public schools.

3. The students have surrogate grandparents and have personalized attention in a non-coercive environment. The exposure of working with older people by students has presented them an opportunity to develop more positive attitudes and understanding of the older citizens.

4. The program has been installed without disruption to the regular school program and has increased positive public relations within as well as without the school.

For a school district adapting or adopting the project, the validator has the following suggestions for evaluating effectiveness:

1. As much as possible information be utilized from the regular school testing program and cumulative folder of the students involved.

2. Unobtrusive measures and archival data be utilized such as:

   a. attendance records both before, during and after the program of regular and targeted students.

   b. behavioral referrals before and after program of both regular and targeted students.

   c. the students' report card and teacher ratings of the targeted students ratings both before, during and after the program should be collected.

SECTION E - 2 (Continued)

PART II--Effectiveness/Success (continued)

d. continuance or withdrawal from the program and school; drop-outs before and after the program starts

e. popularity as well as continuance of the tutors in the program, number of hours spent in the program, etc.

3. The comparison of the student's achievement with his expected level of achievement, as well as past pattern of achievement. Graphs of achievement might help display the results. Also attention should be given to listing the specific objectives accomplished by the student.

4. Previous patterns of achievement within the district can be plotted in a time series design.

5. If personal or social adjustment is a targeted behavior, the many standardized rating forms and tests should be reviewed as to their appropriateness and their validity and reliability.

6. If attitude toward school, self-concept, achievement, motivation are selected as targeted behavior, the many standardized tests should be reviewed first as to their appropriateness and their validity and reliability before homemade scales are constructed.

7. Anonymous ratings by students of the tutors and the program should be secured periodically.

8. Time sample taping as well as interaction analysis of the tutoring sessions could be used to evaluate the performance of the tutors.

9. Local performance objectives should be developed for the inservice program for tutors and used as a basis for evaluation.

PART III--Validation of Evidence on Cost Information - Dr. Edward McDermott

Validation conclusions pertaining to evidence on cost information are:

1. The L.E.A. has followed standard budgetary procedures.

SECTION E - 2

PART III--Validation of Evidence on Cost Information

2. Monies were expended in an appropriate fashion.

3. Fiscal reporting utilized by the L.E.A. can easily be adopted or adapted by another interested school district.

PART IV--Exportability - Dr. John Swayze

The project can be exported as it is written in the Application for Validation.

Any adopting or adapting school district should use their own skills to develop training programs rather than using S.T.E.P. personnel. By using local professionals to do this training the tutors will be taught by personnel who are fully familiar with local problems and issues.

CERTIFICATION BY VALIDATION TEAM (E3)

Name of Project Project S.T.E.P. - Seniors Tutor for Educational Progress.

School District Regional District #9
Center Street, Easton, Conn.

We hereby certify that the above cited project

__X__ is certified as being validated

_____ is not certified as being validated

Date March 6, 1975

Signature of Validation Team:

(1) Robert J. Drummond
(Chairman)

(2) Edward McDermott

(3) [illegible]

(4) _____

Address and telephone number:

College of Education
121 Shibles Hall
University of Maine at Orono
Orono, Maine 04473
Phone: (207) 518-7020
71 Columbia Street
Wakefield, R. I. 02879
Phone: (401) 783-5581
Tunbridge, Vermont 05077
Phone: (802) 889-5584

Comments:

CERTIFICATION BY SCHOOL SUPERINTENDENT (E4)

Name of Project: S.E.E.P.

School District: Redding Public Schools
(Applying agent: Regional #9 Board of Education)

Address: c/o Superintendent of Schools, Morehouse Road, Easton, Conn.

I hereby certify that the above cited project, which is under my administration, will, if validated, and if federal, state or other funds are available, serve as a state or national demonstration site for a period of at least one calendar year from the date of notification of such selection.

Superintendent of School District

March 6, 1975
Date

CERTIFICATION BY CHIEF STATE SCHOOL OFFICER (E5)

I hereby certify that:

1. Project: Project S.T.E.P. - Seniors Tutor for Educational Progress
(Title)

in the Regional District #9 was visited on 3/6/75
(name of local educational agency) (date)

by a team of three experienced and trained validators.
(no. of team members)

2. The team consisted of:

(Name)	(State)
Dr. Robert Drummond	Maine
Dr. Edward McDermott	Rhode Island
Dr. John Swayze	Vermont

3. I have examined the team's final report, and based on the data reported, I am satisfied that the project meets all the criteria of exemplariness and is hereby declared validated.

(Chief State School Officer)

Date

Name of Project Project S.T.E.P. - Seniors Tutor for Educational Progress
State Connecticut

The following checklist will be used to alert appropriate officials of any possible problems which might affect the project being disseminated. State educational agencies may wish to review the items in the checklist when they consider projects for nomination for validation. The questions should be answered in terms of the project.

YES	NO	
___	___	Is the title of the project included?
___	___	Is the name, address and phone number of the Project Director included?
___	___	Is the name of the local superintendent included?
___	___	Is there a statement of the LEA's commitment to continue the project as a demonstration site?
___	___	Is the project period and funding information complete?
___	___	Is the target population identified?
___	___	Are the project objectives clearly and succinctly stated?
___	___	Are the activities designed to achieve each objective clearly stated?
___	___	Are the evaluation strategy and the evaluation findings clearly stated?
___	___	Are the evaluation findings statistically and educationally significant?
___	___	Does the project meet the criterion for exportability?
___	___	Does the project meet the criterion for effectiveness/success?
___	___	Does the project meet the criterion for cost information?
___	___	Does the project have evidence of LEA commitment?
___	___	Did the validating team contain the minimum number of three (3) experts?
___	___	Did the State Advisory Council recommend the project for consideration?
___	___	Does the project conform to ESEA Title III regulations?
___	___	Are there any fiscal audit problems pending?
___	___	Is there any organized negative community reaction to the project?
___	___	Are any civil rights or other legal matters pending?
___	___	Is the majority (over 50%) of the cost of the project contracted?
___	___	If there are nonpublic school children living in the project area having similar needs are they included in the project?

Signed by Appropriate Official for Nominating State

Date